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STATE BOARD OF HEALTH OF FLORIDA

40TH ANNUAL REPORT

FOR THE YEAR ENDING DECEMBER 31, 1939

JACKSONVILLE
FLORIDA STATE BOARD OF HEALTH
1940

STATE OF FLORIDA

Fortieth Annual Report
of the
# STATE BOARD OF HEALTH
for the
Year Ending December 31, 1939

A. B. McCreary, M. D.,
Florida State Health Officer

FLORIDA STATE BOARD OF HEALTH
Jacksonville, Florida
1940

December 1, 1940

His Excellency, Fred P. Cone
Governor of Florida
Tallahassee, Florida

Sir:

I beg to hand you herewith a report of the Florida State Board of Health for the period of January 1, 1939 to December 31, 1939, inclusive.

Respectfully submitted

N. A. Baltzell

N. A. Baltzell, M. D., President
Florida State Board of Health

NAB:kbk

December 1, 1940

Honorable N. A. Baltzell, M. D., President
Florida State Board of Health
Marianna, Florida

Dear Dr. Baltzell:

I herewith submit the annual report of the Florida State Board of Health for the year 1939.

Outstanding during the year was the Survey of Health Conditions in Florida made by the American Public Health Association at the request of the late Dr. W. A. McPhaul, then State Health Officer of Florida. I feel that the survey marked an important step in public health in this state. Florida's health problems were made known to the people at large to an extent never before attained. Ten thousand copies of the Survey have been distributed to Florida citizens. Many of the recommendations contained in the survey have already been carried into effect.

Establishment of full-time health service in all Florida counties is the primary objective of the State Board of Health. During 1939 additional county health units were established and indications point toward the establishment of several more within the next year.

A State-Wide Public Health Committee, composed of over two thousand citizens from all Florida counties was formed during 1939, at the suggestion of the Survey Committee. The value of this enthusiastic group of men and women, and the importance of their contribution to public health in this state cannot be ever-estimated. The officers and members have worked intelligently and untiringly and have been responsible for the spread of full-time local health service to a large degree.

The Directors and staff of the State Board of Health have carried on their work faithfully and well during the year and have cooperated in every way with the members of the Board and the State Health Officer.

Respectfully yours,

A B McCreary M.D.

A. B. McCreary, M. D
State Health Officer

ABMc:kbk

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EPIDEMIOLOGY

Dan N. Cone, M. D., Director

During the year sporadic cases of various communicable diseases occurred throughout the State but at no time was there a threat of an epidemic.

The grand total of all communicable diseases reported for 1939 was 15, 955 excluding venereal disease cases while the total for 1938 was 23, 127 excluding venereal disease cases.*

Diphtheria deaths remained practically stationary during the year and this should serve as a reminder that each child should be immunized early from six to nine months of age and unless the child is known to be Schick negative a second dose of alium precipitated toxoid should be given.

There were four typhoid carriers identified among the permanent residents of the State and eleven out-of-State visitors who were carriers were kept under the observation of health officials while in Florida.

The number of undulant fever cases reported has increased since 1938 and the Bureau is continuing the program of recommending the drinking of pasteurized milk or milk from dairy herds, or family cow, which have been tested and found to be free of Bang's disease.

Typhus fever (endemic, flea-borntype) shows a decided increase during the past year. Rat eradication and rat proofing was instituted in two of the small towns with favorable results.

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* The number of communicable diseases reported by counties during 1939 will be found in the Appendix, Table Xlll. For the number of syphilis and gonorrhea cases reported by age, sex, and color, see page

Tetanus was the cause of thirty-seven deaths during 1939 therefore, it is felt that it is important to insist that every person receiving a deeply lacerated or punctured type of wound should have a dose of the prophylactic anti-toxin at the time of injury.

From an economic stand-point, malaria and hookworm disease continue to constitute two of the major health problems of the State. The planned programs being carried out for control of these two diseases in counties with full-time health units are beginning to show reduced incidence of these two diseases, and if continued should improve the material as well as the health situations in these counties.

The tables on the following pages have been designed to show the number of communicable disease cases reported by age, sex and color and also to show the seasonal incidence of the communicable diseases.

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR

DIPHTHERIA

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	56	43	7	8	114
5 to 9	46	37	5	3	91
10 to 19	15	23	2	1	41
20 to 29	5	8	0	1	14
30 to 39	6	8	1	2	17
40 to 49	2	2	0	0	4
50 to 59	0	0	0	0	0
60 to 69	0	1	0	0	1
70 and over	1	0	0	0	1
Age, Sex and Color not given					16
Grand Total					299

SCARLET FEVER

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	38	33	2	1	74
5 to 9	55	90	0	4	149
10 to 19	32	62	1	1	96
20 to 29	6	22	0	0	28
30 to 39	11	7	0	1	19
40 to 49	1	3	0	0	4
50 to 59	1	0	0	0	1
60 to 69	0	1	0	0	1
70 and over	0	0	0	0	0
Age, Sex and Color not given					26
Grand Total					398

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES

DIPHTHERIA	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	37	30	20	22	10	20	17	14	42	24	34	29	299
1938	77	55	46	58	23	18	28	27	34	51	40	35	492
1937	47	37	29	19	29	39	16	22	47	99	125	100	609
1936	46	23	27	14	11	0	13	11	38	43	34	49	309
1935	34	35	27	15	16	23	20	36	34	81	60	45	426
SCARLET FEVER													
1939	41	58	55	34	30	28	16	14	18	22	42	39	397
1938	41	55	28	39	15	11	13	8	16	32	48	46	352
1937	36	28	39	97	24	14	12	8	5	23	38	53	377
1936	58	22	35	22	24	13	11	13	16	24	20	41	299
1935	47	35	20	12	14	12	12	11	23	23	33	31	273

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

MEASLES

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	129	151	8	8	296
5 to 9	342	358	17	18	735
10 to 19	129	136	8	13	286
20 to 29	17	13	3	6	39
30 to 39	5	8	1	0	14
40 to 49	2	2	0	0	4
50 to 59	2	0	0	0	2
60 to 69	0	0	0	0	0
70 and over	1	0	0	0	1
Age, Sex and Color not given					1339
Grand Total					2716

WHOOPING COUGH

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	177	212	24	35	448
5 to 9	231	227	11	75	554
10 to 19	36	5	0	0	41
20 to 29	0	3	0	0	3
30 to 39	1	1	0	0	2
40 to 49	1	0	0	0	1
50 to 59	0	0	0	0	0
60 to 69	0	0	0	0	0
70 and over	0	0	0	0	0
Age, Sex and Color not given					85
Grand Total					1124

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont)

MEASLES	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	227	446	436	739	549	198	60	9	11	24	11	6	2716
1938	479	1663	3466	2395	591	157	95	25	80	45	92	61	9149
1937	16	18	23	41	118	57	35	26	29	23	98	151	635
1936	6	12	38	66	91	39	19	14	4	3	1	14	307
1935	113	226	261	314	160	38	15	11	11	19	5	3	1176
WHOOPING COUGH													
1939	49	123	203	206	200	114	90	41	24	7	26	16	1099
1938	54	84	36	104	102	71	86	45	95	83	38	78	876
1937	37	20	42	119	63	65	65	23	40	23	21	22	540
1936	23	25	46	57	67	36	41	21	17	14	16	20	383
1935	72	30	56	91	74	51	47	30	16	21	26	18	532

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

TYPHOID

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	7	5	1	0	13
5 to 9	2	1	6	5	14
10 to 19	10	7	9	7	33
20 to 29	11	10	2	1	24
30 to 39	3	10	6	0	19
40 to 49	3	3	1	2	9
50 to 59	4	1	0	0	5
60 to 69	1	0	0	0	1
70 and over	0	0	0	0	0
Age, Sex and Color not given					10
Grand Total					128

MALARIA

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	11	3	2	2	18
5 to 9	10	12	0	0	22
10 to 19	30	22	4	3	59
20 to 29	18	14	4	5	41
30 to 39	15	27	2	4	48
40 to 49	23	15	1	3	42
50 to 59	6	10	0	0	16
60 to 69	8	8	0	0	16
70 and over	4	5	0	0	9
Age, Sex and Color not given					164
Grand Total					435

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont.)

TYPHOID	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	3	6	11	18	27	10	12	10	12	6	5	8	128
1938	7	7	7	20	24	23	10	20	16	10	6	10	160
1937	2	5	12	14	15	8	14	7	18	13	2	23	133
1936	5	10	8	11	17	9	4	7	12	5	2	3	93
1935	4	3	9	13	22	33	36	16	13	6	6	8	169
MALARIA													
1939	24	11	19	41	33	16	76	47	62	50	30	26	435
1938	13	35	18	25	23	19	22	45	95	70	61	45	471
1937	13	9	20	30	39	81	162	155	179	98	61	47	894
1936	48	104	16	4	16	14	62	98	78	140	234	55	869
1935	16	7	14	21	20	56	130	42	56	173	64	214	813

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

TYPHUS

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	0	1	0	0	1
5 to 9	3	3	0	0	6
10 to 19	7	13	0	0	20
20 to 29	18	5	1	0	24
30 to 39	19	10	3	2	34
40 to 49	13	6	2	0	21
50 to 59	6	7	0	0	13
60 to 69	5	5	0	0	10
70 and over	5	2	0	2	9
Age, Sex and Color not given					14
Grand Total					152

TUBERCULOSIS

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	2	3	5	1	11
5 to 9	0	2	1	2	5
10 to 19	7	20	18	36	81
20 to 29	37	46	63	69	215
30 to 39	62	41	76	42	221
40 to 49	90	39	32	19	180
50 to 59	67	20	20	6	113
60 to 69	35	11	7	1	54
70 and over	9	9	0	1	19
Age, Sex and Color not given					17
Grand Total					916

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont.)

TYPHUS (Endemic)	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec.	Totals
1939	3	7	8	6	11	17	21	28	31	7	5	8	152
1938	2	6	4	5	4	8	11	7	6	7	3	12	75
1937	3	6	6	0	4	19	19	12	22	0	7	9	107
1936	2	3	2	0	1	2	16	11	11	3	1	3	55
1935	1	4	1	1	1	3	5	1	4	4	0	2	27
TUBERCULOSIS													
1939	67	82	98	77	98	77	88	87	63	48	56	75	916
1938	154	135	91	131	110	75	64	84	80	59	95	99	1177
1937	78	46	53	135	76	44	75	84	170	100	153	106	1120
1936	67	59	66	40	51	43	44	30	42	62	58	59	621
1935	48	51	55	41	74	41	40	32	32	31	28	50	523

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

POLIOMYELITIS

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	9	9	3	2	23
5 to 9	8	14	1	1	24
10 to 19	9	3	1	2	15
20 to 29	1	2	0	0	3
30 to 39	0	0	0	0	0
40 to 49	0	0	0	0	0
50 to 59	0	0	0	0	0
60 to 69	0	0	0	0	0
70 and over	0	0	0	0	0
Age, Sex and Color not given					1
Grand Total					66

SMALLPOX

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	0	0	0	0	0
5 to 9	0	0	0	0	0
10 to 19	0	0	0	0	0
20 to 29	0	0	1	0	1
30 to 39	0	0	0	0	0
40 to 49	0	0	0	0	0
50 to 59	0	0	0	0	0
60 to 69	1	0	0	0	1
70 and over	0	0	0	0	0
Age, Sex and Color not given					2
Grand Total					4

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont.)

POLIOMYELITIS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	4	2	3	3	11	6	11	8	14	2	2	0	66
1938	2	3	0	1	6	5	5	3	2	2	1	2	32
1937	0	5	4	2	0	1	1	5	9	3	4	1	35
1936	0	0	1	1	0	4	1	7	12	6	7	3	42
1935	1	2	0	0	3	1	3	4	1	1	0	0	16
SMALLPOX													
1939	1	1	0	0	1	0	0	0	0	0	0	1	4
1938	7	1	1	6	0	0	0	0	0	0	0	0	15
1937	0	0	0	0	0	0	0	0	0	0	4	3	7
1936	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	12	2	0	0	0	0	0	0	0	0	14

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

INFLUENZA

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	4	9	1	3	17
5 to 9	2	4	2	1	9
10 to 19	33	6	5	1	45
20 to 29	64	13	4	12	93
30 to 39	31	8	8	12	59
40 to 49	28	19	2	8	57
50 to 59	21	15	4	3	43
60 to 69	7	9	6	1	23
70 and over	6	10	0	0	16
Age, Sex and Color not given					40
Grand Total					402

UNDULANT FEVER

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	0	0	0	0	0
5 to 9	1	2	0	0	3
10 to 19	2	3	0	2	7
20 to 29	4	5	0	1	10
30 to 39	7	4	0	0	11
40 to 49	4	3	0	0	7
50 to 59	4	1	0	0	5
60 to 69	0	1	0	0	1
70 and over	0	0	0	0	0
Age, Sex and Color not given					10
Grand Total					54

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont.)

INFLUENZA	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	9	6	27	57	134	31	23	10	18	10	21	56	402
1938	25	20	8	11	10	3	0	2	2	6	7	18	112
1937	109	120	132	72	21	5	1	3	3	10	31	37	544
1936	21	106	220	139	23	21	5	2	5	15	10	20	587
1935	251	264	93	7	11	1	1	2	4	5	11	12	662
UNDULANT FEVER													
1939	1	3	4	7	1	4	10	7	2	7	6	1	53
1938	0	2	3	5	3	1	7	6	3	6	5	1	42
1937	0	0	1	3	15	0	1	4	2	4	3	4	37
1936	0	0	2	5	2	1	1	0	2	1	2	0	16
1935	0	1	1	0	1	52	5	3	1	4	0	0	68

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

PELLAGRA

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	0	1	1	0	2
5 to 9	1	4	0	0	5
10 to 19	2	6	1	0	9
20 to 29	2	8	1	2	13
30 to 39	1	15	1	7	24
40 to 49	10	17	0	4	31
50 to 59	5	13	0	0	18
60 to 69	1	5	0	1	7
70 and over	3	7	0	0	10
Age, Sex and Color not given					53
Grand Total					172

TETANUS

Age Group	White		Colored		Totals
	M.	F.	M.	F.	
0 to 4	0	1	0	1	2
5 to 9	0	1	2	0	3
10 to 19	0	0	3	1	4
20 to 29	1	0	1	0	2
30 to 39	0	0	1	1	2
40 to 49	0	0	1	0	1
50 to 59	1	0	0	0	1
60 to 69	0	0	0	0	0
70 and over	0	0	0	0	0
Age, Sex and Color not given					0
Grand Total					15

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont.)

PELLAGRA	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	7	7	13	15	50	22	23	9	12	7	3	4	172
1938	4	3	7	9	16	39	11	21	17	26	20	15	188
1937	2	0	5	0	0	0	11	1	6	0	10	2	37
1936	1	1	0	6	5	4	7	4	0	5	1	1	35
1935	3	12	3	11	24	7	1	3	2	3	4	1	74
TETANUS													
1939	1	1	1	0	0	3	3	1	0	2	2	1	15
1938	4	1	2	3	0	0	3	3	1	3	3	2	25
1937	1	2	3	0	0	0	1	0	0	2	0	2	11
1936	3	1	2	2	1	6	2	4	1	5	3	1	31
1935	1	3	2	2	4	1	4	2	2	3	1	2	27

REPORTED CASES OF COMMUNICABLE DISEASES CLASSIFIED ACCORDING TO AGE, SEX AND COLOR (Cont.)

TULAREMIA

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	0	0	0	0	0
5 to 9	0	0	0	0	0
10 to 19	0	0	0	0	0
20 to 29	3	1	0	0	4
30 to 39	2	1	2	3	8
40 to 49	5	2	0	0	7
50 to 59	3	0	0	0	3
60 to 69	0	0	0	0	0
70 and over	0	0	0	0	0
Age, Sex and Color not given					3
Grand Total					25

PARA-TYPHOID

Age Group	White M.	White F.	Colored M.	Colored F.	Totals
0 to 4	1	0	0	0	1
5 to 9	0	0	0	0	0
10 to 19	0	1	0	0	1
20 to 29	2	1	0	0	3
30 to 39	4	1	0	0	5
40 to 49	1	0	0	0	1
50 to 59	0	1	0	0	1
60 to 69	1	0	0	0	1
70 and over	0	0	0	0	0
Age, Sex and Color not given					1
Grand Total					14

SEASONAL INCIDENCE OF REPORTED CASES OF COMMUNICABLE DISEASES (Cont.)

TULAREMIA	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
1939	0	0	1	0	0	0	0	0	0	0	17	7	25
1938	1	0	0	0	0	0	0	0	0	1	0	0	2
1937	0	0	0	0	0	0	4	1	0	0	1	0	6
1936	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	2	0	0	0	0	0	0	0	0	2
PARA-TYPHOID													
1939	1	1	1	1	1	1	3	2	1	0	1	1	14
1938	0	2	0	0	0	0	0	0	3	2	0	3	10
1937	1	0	0	0	0	1	1	1	2	1	2	0	9
1936	0	0	0	0	0	1	1	1	1	0	0	0	4
1935	0	1	0	0	0	0	0	0	3	0	0	0	4

SYPHILIS CASES REPORTED BY AGE, SEX AND COLOR

MONTH	UNDER 1 year White M.	UNDER 1 year White F.	UNDER 1 year Colored M.	UNDER 1 year Colored F.	1 to 9 years White M.	1 to 9 years White F.	1 to 9 years Colored M.	1 to 9 years Colored F.	10 to 19 years White M.	10 to 19 years White F.	10 to 19 years Colored M.	10 to 19 years Colored F.	20 to 29 years White M.	20 to 29 years White F.	20 to 29 years Colored M.	20 to 29 years Colored F.	30 to 39 years White M.	30 to 39 years White F.	30 to 39 years Colored M.	30 to 39 years Colored F.
January	1	5	1	1	0	6	5	2	2	9	31	44	35	33	112	195	24	11	121	156
February	0	5	2	2	5	6	5	5	6	24	33	90	44	59	151	246	31	43	122	162
March	0	2	1	2	0	8	0	3	5	13	29	89	36	48	157	255	35	26	100	169
April	0	4	2	2	1	2	5	9	8	21	26	57	34	47	148	236	22	18	128	105
May	0	0	3	0	0	1	7	1	6	16	21	62	33	40	106	150	17	16	95	101
June	1	1	1	0	6	1	3	3	3	5	27	19	19	28	85	138	34	24	59	89
July	0	1	7	1	4	5	4	6	13	24	32	105	82	116	201	382	59	67	160	210
August	0	2	2	0	3	3	15	6	14	18	37	103	62	75	225	395	47	50	200	241
September	0	2	3	0	3	8	14	11	13	30	48	128	74	93	243	486	64	63	205	275
October	0	0	0	1	1	0	6	10	14	16	51	140	47	81	205	447	47	56	177	258
November	0	0	3	3	2	6	6	8	8	13	50	125	55	100	205	402	51	49	169	249
December	1	1	7	3	3	4	3	4	33	48	91	187	56	98	230	459	61	56	228	310
TOTALS	3	23	32	15	28	50	73	68	125	237	476	1149	577	818	2068	3791	492	479	1764	2325

SYPHILIS CASES REPORTED BY AGE, SEX AND COLOR (Cont.)

Month	40 to 49 years				50 to 59 years				60 or Over				Age Not Given				Sex and Color not Given
	White		Colored		White		Colored		White		Colored		White		Colored		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	
January	20	11	73	37	12	1	36	8	4	1	15	4	9	9	26	69	42
February	19	19	62	49	17	5	27	9	8	1	10	3	31	29	48	91	27
March	17	11	59	47	18	4	15	21	6	2	12	8	24	3	26	0	18
April	23	18	48	37	15	2	19	11	5	2	14	6	26	59	79	129	27
May	14	8	46	44	10	2	23	11	7	3	12	6	21	49	49	103	40
June	22	5	26	25	7	4	16	19	5	0	11	9	12	25	28	50	54
July	53	25	73	83	34	9	46	20	16	9	24	14	44	55	113	132	12
August	40	21	101	89	15	7	33	19	8	4	26	12	29	18	88	105	28
September	50	45	96	97	26	5	44	29	14	5	30	17	33	27	115	144	14
October	37	34	88	74	31	13	32	24	7	3	20	7	21	16	53	103	25
November	30	27	58	87	20	6	51	30	13	5	11	13	26	21	44	65	18
December	28	29	113	104	36	18	64	35	22	11	22	13	24	34	82	128	17
TOTALS	353	253	843	773	241	76	406	236	115	46	207	112	300	345	751	1119	322
GRAND TOTAL																	21092

GONOCOCCUS CASES REPORTED BY AGE, SEX AND COLOR

Month	Under 1 year				1 to 9 years				10 to 19 years				20 to 29 years				30 to 39 years			
	White		Colored		White		Colored		White		Colored		White		Colored		White		Colored	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	0	0	2	0	0	2	2	5	6	13	6	11	7	3	2	1	4	1	2	0
February	0	0	0	0	2	0	0	0	3	4	6	3	30	5	13	2	7	0	3	0
March	0	0	1	0	0	0	0	1	9	3	2	1	23	8	10	1	3	0	2	0
April	0	0	0	0	0	4	1	3	11	1	15	1	27	6	11	1	5	1	1	0
May	0	0	0	0	0	3	0	2	4	4	10	0	17	8	16	0	7	3	8	0
June	0	0	0	0	0	1	0	0	8	0	3	2	15	6	6	1	3	1	4	0
July	0	2	0	0	1	6	0	6	10	4	15	1	68	15	23	2	21	6	3	0
August	0	1	0	0	0	2	0	4	19	13	10	4	49	17	15	4	10	3	5	2
September	0	0	1	0	0	14	1	1	17	5	11	2	47	14	12	2	11	6	7	0
October	0	0	3	0	1	5	3	1	6	12	5	3	20	15	21	10	4	0	7	3
November	0	1	0	0	0	0	0	2	13	2	21	0	18	12	26	1	10	5	7	0
December	0	1	3	2	5	4	2	6	12	7	10	4	14	3	4	6	0	0	7	0
TOTALS	0	5	10	2	9	41	9	31	128	68	114	32	335	112	159	31	85	26	56	5

GONOCOCCUS CASES REPORTED BY AGE, SEX AND COLOR (Cont.)

Month	40 to 49 years				50 to 59 years				60 or Over				Age not Given				Sex and color not Given
	White		Colored		White		Colored		White		Colored		White		Colored		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
January	1	0	1	0	1	0	0	0	0	0	0	0	7	3	2	0	9
February	1	2	1	0	0	0	0	0	0	0	0	0	3	4	3	2	15
March	3	1	0	0	0	1	0	0	1	0	0	1	7	4	2	3	15
April	6	1	1	0	1	0	0	0	0	0	0	0	6	3	4	2	17
May	1	1	1	0	0	0	1	0	1	0	0	0	5	3	4	2	14
June	2	0	1	0	0	1	1	0	0	0	0	0	2	3	2	3	12
July	4	1	1	0	2	2	0	0	0	0	0	0	3	2	5	5	5
August	12	0	4	0	1	0	0	0	0	0	0	0	4	3	6	4	10
September	6	2	1	0	2	2	0	0	1	0	0	0	2	2	3	2	12
October	3	0	1	1	2	0	1	0	1	0	0	0	5	3	3	2	12
November	3	0	2	0	0	0	0	0	0	0	0	0	6	2	4	2	14
December	0	0	0	0	0	0	0	0	0	0	0	0	4	3	7	5	13
TOTALS	42	8	14	1	9	6	3	0	4	0	0	1	54	35	45	32	148

GRAND TOTAL	1650

VENEREAL DISEASE CONTROL

L. J. Hanchett, M. D., Acting Director
(P.A. Surgeon, U. S. Public Health Service)

The activities of the Division of Venereal Disease Control have been considerably expanded during 1939. This was made possible by an increased allotment of funds from the United States Public Health Service and a special appropriation from the State Legislature to carry on venereal disease control work. The personnel of the Division now includes the following: director, nurse consultant, colored educational consultant, a secretary and two clerks.

The plans for venereal disease control in the state have included the following objectives:

(1) Expansion of and improvement in existing diagnostic and treatment facilities.
(2) Improvement in the laboratory facilities for the diagnosis of early syphilis.
(3) Advancement of educational work.
(4) Improvement in contact investigation and follow-up work in the various clinics throughout the State.
(5) Improvement in the reporting of all the venereal diseases by physicians, hospitals, and clinics.
(6) Distribution of free antisyphilitic drugs to physicians for the treatment of indigent and semi-indigent patients with syphilis.

Diagnostic and Treatment Facilities. At the beginning of 1939, there were forty public clinics in the State for the diagnosis and treatment of syphilis patients. During the year, the number of such clinics has increased steadily each month, until at present, there are sixty-seven. These clinics are operated under the jurisdiction of the various county and city health departments, and financed largely from Federal and State funds. They provide free diagnostic and emergency treatment to all patients who apply; free diagnostic and treatment facilities to all patients referred by private physicians, either for continued treatment or for consultative advice and opinion; and all patients unable to afford private medical care.

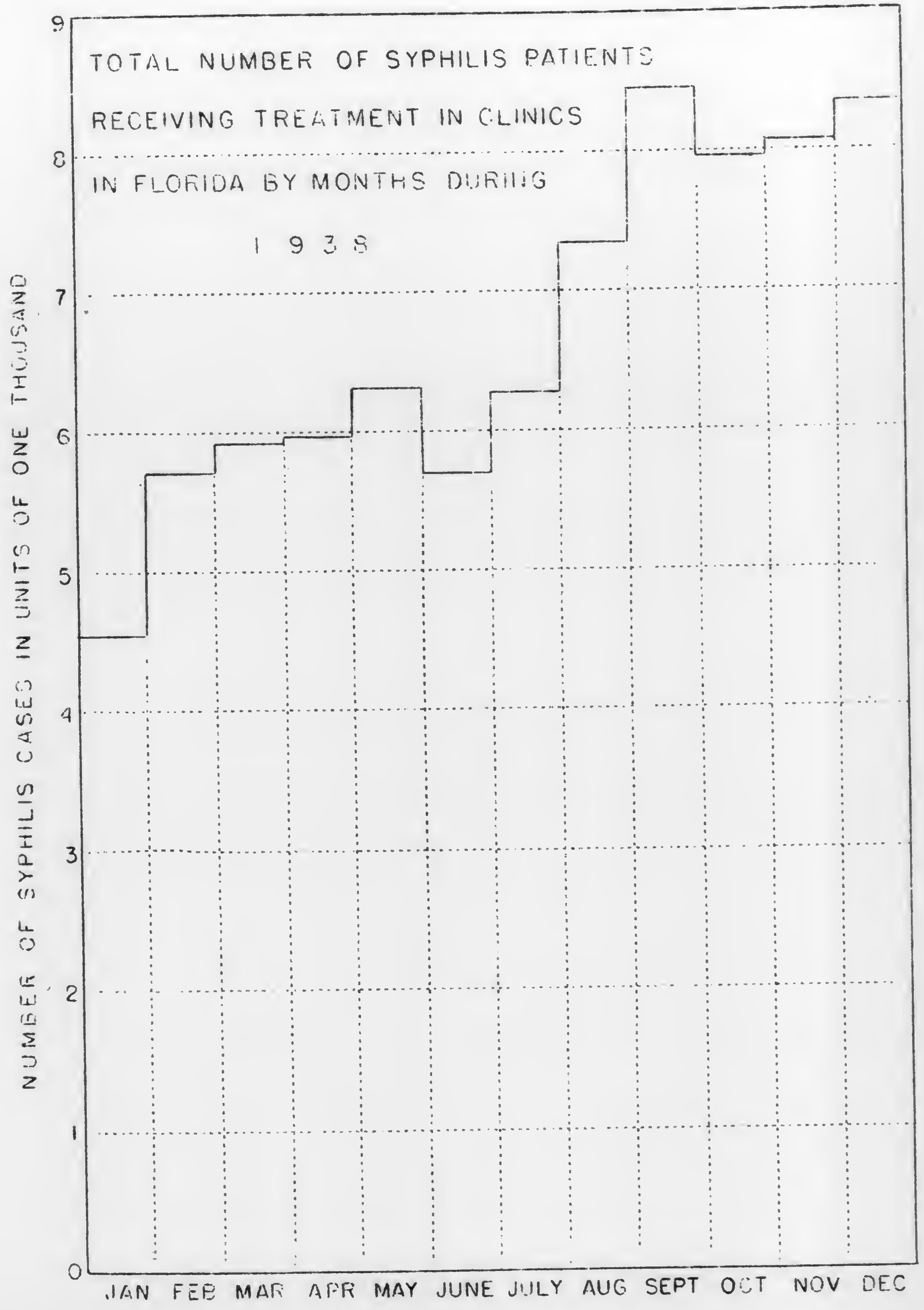
During the past year the total number of syphilis patients receiving treatment in all the various clinics has increased from 4,560 in January to 8,360 in December. This can not be interpreted as indicating an increased number of syphilis cases in the state, but rather as an indication that more people are coming under treatment and fewer of them are being neglected because of indigency or other reasons. A study of the accompanying graph (Fig. 1) will show the continually increasing case load of syphilis patients being treated in the clinics of the State.

Laboratory Facilities. The laboratories of the State Board of Health and its various branches, have for a number of years, been doing serological tests on blood specimens sent in by physicians, hospitals, and clinics from all over the state for the diagnosis of syphilis. The number of such specimens sent in has been increasing each month during the year, and it has been necessary to take on added personnel and to purchase more modern equipment to carry the load.

During the past year darkfield equipment has been installed in the central laboratory at Jacksonville and in each of the branch laboratories at Miami, Tampa, Tallahassee, and Pensacola. In all of these laboratories, trained technicians are available to make proper darkfield examinations on material sent in by physicians or clinics to determine the presence of treponema pallida. In addition to this, the laboratories in Jacksonville, Miami, and Tampa, are equipped to do direct darkfield examinations on male patients with suspected early syphilitic lesions.

This is a very definite forward step by the state laboratories and provides a valuable service to physicians and to the public throughout the state, by enabling the physicians to make an earlier and more accurate diagnosis of patients with primary and secondary syphilitic lesions. Much educational work remains to be done in order to familiarize physicians with the use and value of this service.

Educational Activities. Because of the high incidence of syphilis among the colored people, special emphasis has been placed on educational work among this race. The colored physician in the Division has been in the field continually, presenting lectures and educational films in the colored churches and schools over the entire state. That his efforts have been worthwhile is evidenced by the fact that the colored people are gradually becoming more syphilis conscious and many more of them are now seeking treatment in the early stages of the disease. Other educational activities have included the distribution of informative literature on the subject to both colored and white patients, through the offices of physicians and by the various clinics. In addition, advantage is



taken of every opportunity to present lectures and educational films to various civic organizations and professional groups.

Epidemiological Work. As with other communicable diseases, epidemiological investigation is one of the most important phases of venereal disease control activities. To treat only those venereal disease patients who voluntarily present themselves for diagnosis and treatment is to miss many cases of early syphilis, who in all probability are going untreated and spreading their infections to untold numbers of our population. The follow-up work on delinquent patients is also of the utmost importance in order to prevent infectious relapses in inadequately treated patients.

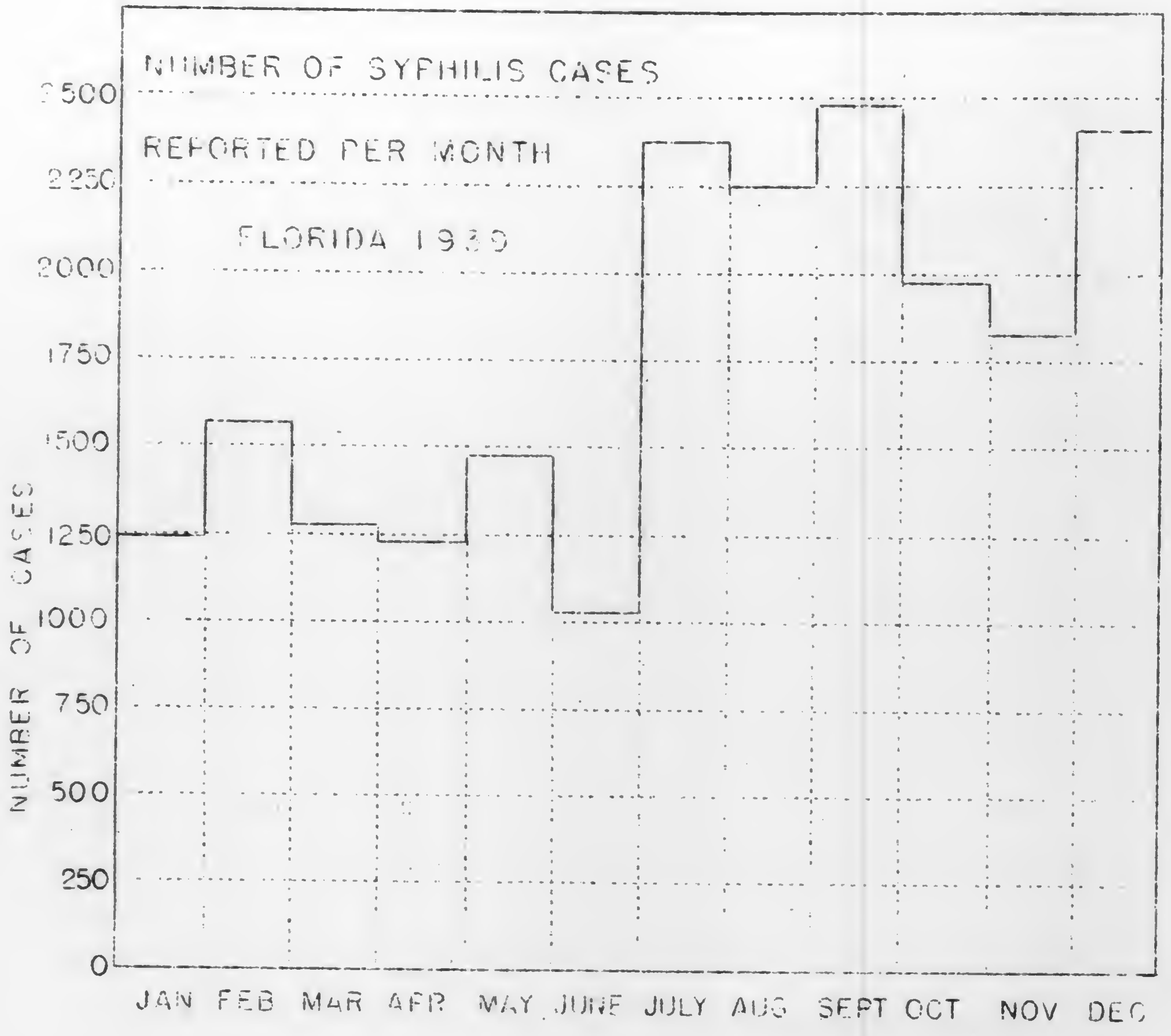
Because of the extreme importance of this phase of the program, every effort has been made to improve this work in local health departments. An additional nurse was provided in all of the county health units, so that the full time of at least one trained public health nurse could be spent in tracing contacts of early cases and bringing them in for examination and treatment, if found to be infected and in making home visits to delinquent patients to persuade them to return for further treatment. Many of the city health departments have also employed either nurses or social workers to carry on these activities.

While in many of the county and city health departments the quantity and quality of epidemiological work done has been disappointing, in others, improvement has been noted and desired results are being accomplished. In the county health departments, there were over three times as many home visits made to delinquent patients during the past year as in the previous year.

Morbidity Reporting. Prompt reporting of all cases of venereal disease by all physicians and institutions is required by law in this State. This is absolutely necessary to enable local and state health officers to know the extent of the venereal disease problem in various localities and in the state as a whole. Adequate and complete reporting is also a necessity to enable the local health departments and the State Board of Health to make frequent periodic studies of the effectiveness of various control activities.

With the beginning of the new fiscal year, starting July 1, 1939, renewed efforts have been made by the Division of Venereal Disease Control, as well as by the various local county and city health departments, to obtain better and more complete reporting of all venereal disease cases by physicians, clinics, and hospitals. The response by all concerned to these efforts has been very gratifying and it has been observed that most physicians really are anxious to cooperate in every way with our program and they now accept as a matter of routine their responsibility in reporting promptly to the

FIG. II



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proper health authorities every new case of venereal disease coming under their care.

The accompanying graph (Fig. 11) will show the total number of syphilis cases reported each month by all sources during 1939. Properly interpreted, this does not mean that there are more cases of syphilis now than previously, but that more attention is paid to reporting and that perhaps more patients who have the disease are being diagnosed and treated.

Distribution of Drugs for the Treatment of Syphilis Patients. The State Board of Health furnishes free antisyphilitic drugs to physicians throughout the State for the treatment of indigent and semi-indigent patients. Further interesting evidence of gains made in the control of this disease is shown by a study of the amount of such drugs dispersed each month during the past year. In January 1939 there were 671 doses of antisyphilitic drugs distributed free to private physicians in this State. During each month of the past year this number has continually shown a marked increase over the previous month, and during the month of December 1939, 4,379 doses of these drugs were distributed free to private physicians. These figures would seem to indicate that the total number of syphilis patients being treated by physicians over the State has greatly increased during the past year and is further evidence of results obtained by educational activities.

While the above is evidence of noteworthy gains made in the program for the control of syphilis, there remains much yet to be accomplished, if the disease is to be controlled in this State. Outstanding needs may be listed as follows:

(1) Continued and more extensive educational activities reaching all strata of society in every community.
(2) The establishment of additional diagnostic and treatment facilities. Two-thirds of the counties in the State still have no clinic facilities for the treatment of indigent and medically indigent patients and are still without a full-time local health department.
(3) Improvement of existing facilities, expecially in regard to clinic equipment and provision for adequate personnel. The decentralization of certain facilities, so that residents of rural, as well as urban areas, may have ready access to treatment.
(4) More and better contact investigation and follow-up work, especially on cases of early syphilis.
(5) More local and state funds to carry our share of the expense, necessary to vigorously carry out all steps of the program.

TUBERCULOSIS

A. J. Logie, M. D., Director

In 1939 the Division of Tuberculosis inaugurated the new antituberculosis program. The original program of tuberculin tests and x-ray examinations among indigent contacts, indigent suspected cases and senior high school students was altered. The present program is concentrated upon indigent contacts, indigent suspected cases, transients, families of those on relief, unemployed, and unemployables. Special emphasis is laid upon the negro population. Tuberculin tests are used only in the case of children under the age of fifteen. The Vollmer Patch Test is being encouraged because a recent comparative study in Tampa convinced this Division that the patch test was more efficient and more accurate than both strengths of PPD. The patch test is also simpler to apply and there are fewer objections to its application, since no needle is employed. The chief feature of the antituberculosis program is the x-ray examination. This has been done in the same manner as in the last two years. The Powers Rapid X-ray Unit is employed with paper film in rolls.

During this annual period the original antituberculosis program was continued in a number of counties:

GULF COUNTY. On January 16, tuberculin testing began in this county. The number of children tuberculin tested was 113 of which 32 (28.3%) showed positive reactions. Of these positive reactors none showed adult type tuberculosis on x-ray. In Gulf County 52 adults were tested, of which 34 (65.4%) showed positive reactions. Of these positive reactors, two showed evidence suggestive of tuberculous pathology on x-ray.

FRANKLIN COUNTY. Tuberculin testing began in this county on January 16. The number of children tested was 276, of which 140 (53.6%) showed positive reactions. Of these positive reactors none showed evidence of adult type tuberculosis. Adults tested numbered 99, of which 80 (87.7%) showed positive reactions, and of these adult reactors, 6 showed pathology suggestive of adult type tuberculosis.

HIGHLANDS COUNTY. Tuberculin testing began on January 30 in this county. There were 266 individuals tuberculin tested, of which 197 were school children and 69 adults. Of the school children, 42.6% were positive reactors. Of those children x-rayed, only 1 (1.1%) showed reinfection type tuberculosis on x-ray.

Of the adults tested, 73.9% were positive reactors. Of the adults x-rayed, 6 (11.6%) showed x-ray evidence suggestive of reinfection type pulmonary tuberculosis.

BAY COUNTY. Tuberculin testing began in this county on February 6. There were 444 children tuberculin tested, of which 31.5% showed positive reactions. Of these positive reactors radiographed, only one showed evidence of reinfection type tuberculous pathology.

There were 145 adults tuberculin tested, of which 41% were positive reactors. Of these positive reactors x-rayed, one showed tuberculous pathology.

Upon the request of the Florida Tuberculosis Association that the x-ray field unit radiograph a special group of school children, and upon an agreement that the local tuberculosis association would contribute towards the cost of the x-raying at the rate of 40¢ per film, the following counties were investigated:

MARTIN COUNTY. X-raying began in this county on February 28. There were 185 children tuberculin tested, of which 68 (36.9%) showed positive reactions. Of these reactors x-rayed, none showed tuberculous pathology.

There were 24 adults tested, of which 15 (62.1%) showed positive reactions. Of these reactors x-rayed, one showed chronic pulmonary tuberculosis.

ST. LUCIE COUNTY. X-raying began in this county on March 1. There were 236 children tuberculin tested, of which 107 (45.3%) showed positive reactions. Of these reactors who were x-rayed, none showed tuberculous pathology.

There were 23 adults tuberculin tested, of which 16 (69.5%) showed positive reactions. Of those x-rayed, only one showed tuberculous pathology.

INDIAN RIVER COUNTY. X-raying began in this county on March 2. There were three individuals discovered who showed definite reinfection type tuberculosis on the x-ray plate, of which all but one were minimal cases. The results of the tuberculin tests and the x-ray findings have been reported to the family physicians mentioned by these individuals who were investigated. Reports in these cases were distributed to these physicians by the local health officer.

DUVAL COUNTY. In the latter part of March the program was initiated in this county under the direction of Dr. K. K. Waering, the Director of the Duval County Health Unit. In all, 3,462 individuals were tuberculin tested, of which 3,236 were children and 226 adults. Of the children tested, 997 (30.8%) had positive reactions and of the adults tested, 122 (54%) reacted positively. There were 1,197 children whose chests were given x-ray examinations. Of this group, 12 (1%) showed x-ray evidence of reinfection type tuberculosis. There were 329 adults who received x-ray examinations and, of these, there were 28 (8.5%) who showed reinfection type tuberculosis.

HILLSBOROUGH COUNTY. In this county the senior high school students were tuberculin tested and their chests x-rayed when indicated. This additional work of x-raying the students was done only because this county had not been included in the previous program which concentrated upon an investigation of high school students for tuberculosis. Over 4,000 students were tuberculin tested with PPD tuberculin in two strengths. At the same time, for the purpose of making a comparative study, each student also received a patch test, using the Vollmer Patch Test. The results of this comparative study are being worked upon at the present time and will be published in the form of an article at a future date. Those students who had a positive tuberculin reaction, and the individuals from the groups selected for the present program received x-ray examinations of their chests. Paper film in rolls of 100 exposures were employed along with the Powers rapid x-ray unit. Single flat films of the chest were taken in the postero-anterior plane and then shipped to the Powers X-Ray Company in Glen Cove, New York, for developing. The Director of the Division of Tuberculosis interpreted the plates and forwarded the results to the County Health Officer so that a report on each case might be distributed to the family and the family physician. 2,858 individuals received x-ray examinations. Of this group, 13 cases

suggestive of active tuberculosis were discovered. These cases were unknown and were found in apparently healthy people. The percentage of cases of apparently healthy persons showing chest lesions suggestive of pulmonary tuberculosis in Hillsborough County was 0.48%. This low percentage was expected, as the majority of the persons investigated were high school students. The 13 cases discovered were reported not only to the county health officer but by direct communication to the family physician interested in the case.

It was imperative that the antituberculosis program be revised so that a more productive group of the population could be selected, more cases discovered, and greater value received for the moneys invested in the x-ray equipment. The Director of the Division decided to obtain the opinions and suggestions of the local health officers.

Several trips were made by the Director to the various Directors of the county health units and conferences were held in order to determine the tuberculosis needs of each independent organization so that a revision in the original program could be made in consideration of the particular problems to be met in any special area.

It is felt that the original antituberculosis program has served its function extremely well. It was confined chiefly to senior high school students in an endeavor to educate the children in regard to tuberculosis and through them to reach the parents. The results of the program have been excellent. The program has proved to be an efficient case-finding medium. Although the cases discovered were relatively few in number, in the great majority of them the prognosis was favorable because of the early diagnosis of the condition in the minimal stage. The program has augmented and materially assisted the work of the county health unit and has encouraged the inauguration of local antituberculosis programs. It has been of great value and of mutual benefit to the patient and to the physician in general practice. It has stressed the important role of the family physician and the roentgenologist in the prevention of tuberculosis. It has aroused great interest among the laity and has served as an excellent means of health education. It has combined the individual efforts of the Florida Medical Association , the Florida Tuberculosis and Health Association and the State Board of Health, and has merged them into a concerted attack upon the tuberculosis problem in Florida. The program will be continued among contacts and probably extended to include inmates of custodial institutions, certain industrial groups, persons who are unemployed and a greater proportion of the negro population.

It is the intention of this Division to revisit each county with a health unit and to extend the program so that all indigent contact and suspected cases of tuberculosis, as well as known cases, will be x-rayed. It is also intended that as many of the negro population be included in the program as possible, since this race furnishes the greatest tuberculosis mortality.

At a recent meeting of the Committee on Tuberculosis and Public Health of the Florida Medical Association, there was unanimous approval of the features of the revised antituberculosis program, and the suggestion was made that the program include as many negroes as possible.

The need for a change in the program can readily be seen in the comparison between the number of cases discovered among contacts and among those not reported as contacts. In the contacts, 4.6% were found to have latent apical lesions, compared to 0.5% among those with no contact. Among the contacts, 3.1% were found to have manifest tuberculous lesions, as compared to 0.15% without contact.

The revised antituberculosis program was inaugurated in the following counties:

TAYLOR COUNTY. Beginning November 13, 1939, there were 297 individuals who received x-ray examinations of their chests. The great majority of them consisted of indigent contacts and relief families. Of this group there were 4 whose x-ray films showed evidence suggestive of tuberculosis. This gives the county a percentage of 1.67, which is fairly low for susceptible groups.

GADSDEN COUNTY. X-raying in this county began November 20, 1939. The statistics are as follows:

Number of individuals x-rayed-	1,688
Number of unsatisfactory plates-	311
Number of positive x-ray findings-	24

As 311 plates were unsatisfactory we will have to base our statistical results on the 1,377 satisfactory plates. Of the satisfactory plates, 24 showed positive findings as regards tuberculosis. This gives Gadsden County a percentage of 1.74. In other words, 1.74% of the groups selected for this program showed x-ray evidence of pulmonary tuberculosis which, to me, proves that the program was very worthwhile and we have finally centered on that portion of the population where we can really say that we are getting good value for our money.

There was one interesting case - by name - Lilla Smith, a seven year old white female, who showed enlarged hilar lymph glands - an active primary tuberculosis. There were also four individuals who showed lung changes due to enormously large hearts or aortae.

LEON - WAKULLA COUNTIES. X-raying in these counties began November 27, 1939. In all, 1,848 persons were given x-ray examinations. Of this group, 160 x-rays were unsatisfactory. There were 28 cases which showed some abnormality. Of these 28, 16 - or 0.94% of the total x-rayed showed evidence of active tuberculosis. There were five cases which showed evidence of healed pulmonary tuberculosis. There were six cases which showed enlarged cardiac or aortic shadows, and one case of dextrocardia (a true situs inversus).

The Director of the Division presented a number of papers to several of the county medical societies. One of the papers, "The Value and Significance of the Tuberculin Test", was published in the Annals of Internal Medicine, Volume 13, No. 2, August 1939.

In the March 1939 issue of the American Review of Tuberculosis, Volume 39, No. 3, page 408 to 418, there was published an account of the results of the antituberculosis program by the director of the Division under the title, "Tuberculosis Survey in Florida." Many letters were received complimenting the nature of the program and the results obtained; including one letter from Dr. J. A. Myers, past president of the National Tuberculosis Association; another from Dr. E. J. Murray, past president of the Southern Tuberculosis Association; one from Dr. W. H. Hatfield, Provisional Medical Director, Vancouver, B. C.

The activities of the Director of the Division were quite numerous and included conferences, talks to various organizations, radio talks, lectures and among some of the more important activities were:

Round table conference concerning x-ray examinations of school teachers and other school employees, at which the Director presided. A representative of each of the following groups was present at this conference: Class-Room Teachers of the State, State Department of Public Instruction, State Radiological Society, State Medical Society, State Tuberculosis Association, and State Board of Health. The result of this conference was that a recommendation was made to the State Department of Public Instruction that an x-ray examination of the chest be included in the annual medical examination of each school employee before that employee can be awarded a contract.

A three-day institute was planned by the Director of the Division of Tuberculosis to which each health officer came. The institute concerned tuberculosis and was held at the State Tuberculosis Sanatorium in Orlando. The result of this tuberculosis institute can be gauged by the enthusiasm with which each health officer attended the course and by the requests for repetition of like symposia.

A poignant factor is that the health officers had to stand the entire expense of attending the institute and in spite of this handicap the enthusiasm was overwhelming, and the attendance unanimous.

MALARIA RESEARCH

Mark F. Boyd, M. D., Director*

A. Completed Studies:

In the period under review, manuscripts with the following titles have been submitted to the home office. A discussion of their contents is superfluous.

80) Mark F. Boyd and Walter C. Earle. "On the susceptibility of a Neotropical *Anopheles punctipennis*, Theobald, 1901, to Nearctic and Neoptropical Strains of *Plasmodium falciparum*."

81) Mark F. Boyd. "On strains or races of the malaria parasites."

82) Mark F. Boyd. "On the susceptibility of *Anopheles quadrimaculatus* to *Plasmodium vivax* after prolonged insectary cultivation."

83) Choice B. Matthews. "Observations on Serum Cholesterol in Malaria."

84) S. F. Kitchen. "Multiple infection of the Erythrocytes in Human Malaria."

85) Mark F. Boyd. "The influence of sporozoite dosage in vivax malaria."

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*From the Division of Malaria Research, Rockefeller Foundation International Health Division, Tallahassee, cooperating with the Florida State Board of Health.

86) Mark F. Boyd. "On the correlation between the incidence of stomach and gland infection in *Anopheles quadrimaculatus* infected with *Plasmodium vivax*."

87) Mark F. Boyd. "Some characteristics of artificially induced vivax malaria."

88) Mark F. Boyd and Daniel M. Jobbins. "Further observations on the comparative susceptibility of Nearctic and Neotropical anophelines to co-indigenous strains of *Plasmodium falciparum*."

89) Choice B. Matthews. "The reactivation of latent malaria infections."

90) Mark F. Boyd, S. F. Kitchen and Choice B. Matthews. "An attempt at the hybridization of two strains of Plasmodium vivax."

B. Work in Progress:

1. The negative results of our attempts to hybridize two strains of *Plasmodium vivax* by feeding anophelines on an infectious patient who had been simultaneously infected with two strains of parasites, were submitted in paper 90 previously listed. As yet we have not had opportunity to ascertain the possibilities of the other approach to this problem.

2. The resignation of Doctor W. C. Earle from the staff has terminated temporarily at least, the study of the comparative susceptibility of *A. pseudopunctipennis* and *A. quadrimaculatus* to Mexican and Floridian strains of *P. vivax*.

3. The results of the sudy of serum cholesterol in malaria indicate that it is unlikely that this subject can be further

pursued with advantage.

4. The Search for means to reactivate a latent malaria infection has been terminated, at least for the present. Available space in the infirmary is required for patients experiencing acute attacks, which makes it impracticable to retain in, or return to the infirmary, the latent cases required for this study. The results secured were reported in paper 89.

5. Study of thio-bismal:

Thio-bismal, a drug used in the therapy of lues, has a remarkable property first observed by Dr. Walter F. Schwartz of Cleveland and called to our attention by Doctor Magath of Rochester, Minn., of attaching the half-grown trophozoites. Thus if administered to a vivax patient with quotidian paroxysms, it will extinguish the paroxysm due on the subsequent day, thus changing the attack to a tertian. We have verified this property and are making some observations to ascertain if it possesses any effect if given during the incubation period.

6. Study of the Albumin-globulin ratio:

The occurrence of edema in certain patients suggested the desirability of a study to ascertain if possible whether the development of this symptom could be attributed to abnormalities in the ratio of these serum components. Specimens of blood were secured at regular intervals during the clinical attack and thereafter from 8 patients. The examination of these specimens was affected by the collaboration of Mr. H. O. Proske, Chief of the Central Hygienic

Laboratory, of the Tennessee Valley Authority, Wilson Dam, Alabama, who made determinations of total protein, albumin, globulin, fibrin and euglobin on each specimen.

A preliminary report based on the results secured from the systematically studied patients will be submitted at an early date. None of these however, exhibited an edema, a circumstance requiring the continuation of these observations as opportunities arise.

The fluctuations in the euglobulin content appear of especial interest.

7. Hyperimmunization:

In preparation for a series of studies on humoral immunity, a number of patients who have recovered from attacks induced by the McCoy strain have been hyperimmunized. After some preliminary infections spaced rather closely together, it was decided that it is preferable to space these superinoculations three weeks apart, in order to allow ample time for the development of superinfection. The doses of trophozoites given were in general rather large, for the most part in excess of 100 million parasites. Re-inoculations were continued until they no longer produced a super-infection.

8. Auto-hyperimmunization:

The foregoing hyperimmunizations were done with homologous parasites derived from exogenous sources. We are also attempting hyperimmunization endogenously. The idea developed from an opinion often heard expressed by country people in Mississippi to the effect

that they did not have as much malaria as they formerly had before they received typhoid vaccine. While this was once interpreted as signifying that much mild typhoid may have masqueraded as malaria, the idea seemed possible that the injections of typhoid vaccine may have stimulated sub-clinical relapses that accelerated hyperimmunization.

9. Minimal Infective Dose:

In connection with studies on humoral immunity to the McCoy strain of *P. vivax* it is desirable to ascertain the minimal infective dose. To date three experiments have been performed, diminishing the number by dilution. The first was performed with two inoculations of 240 parasites, 2 with 120 and 4 with 60. All except one of the 60 resulted in takes. In the second experiment one was inoculated with 45 and 3 with 15. All resulted in takes. In the third experiment one inoculation was with 30 parasites and three with 10. All resulted in takes.

It is obvious that we have not as yet determined the minimal infecting dose, and the results so far available suggest that a single parasite may be the answer. This circumstance, however, is not an obstacle to the extension of observations on humoral immunity.

We shall continue the experiments to inoculation with single parasites using both the dilution method and single cell isolation. When working with single cells to be introduced intravenously there is always an uncertainty as to whether the single cell was actually introduced. There is also the question of the significance in relation to the age of the trophozoite employed, as if one employed a presegmenter instead of a half grown schizont, the effect of the former might be nearly the same as an inoculation by 15 trophozoites.

10. Humoral Immunity:

An experiment reported in the 1938 annual report appeared to indicate the presence of antibodies in a patient who had not been deliberately hyperimmunized. We are endeavoring to repeat and extend these observations with the serum of hyperimmunized patients. Failures from our first efforts indicated that certain previously unconsidered factors required preliminary attention. Their examination has required the expenditure of considerable time and material. As a consequence, however, we have ascertained that preliminary tests must be made to determine the compatibility of the erythrocytes of the donor of the trophozoites with the serum of the hyperimmune individual and the contributor of the normal serum. It has furthermore been found that the parasite suspensions cannot be incubated at 37°C for more than one hour in the relatively low concentrations employed without an adverse effect on the parasites. Consequently it is undesirable to incubate the immune-serum parasite mixtures at 37°C for more than 45 minutes.

We regard this project of such importance that it will take precedence over all other undertakings.

11. Study of Comparative Susceptibility.

The results of this project were embodied in a report submitted as number 88 in the foregoing list.

12. Morphological characteristics of strains of P. falciparum.

The study of possibly significant differences between several strains of falciparum gametocytes is being continued. Statistical analysis (by Miss P. Putnam) of quite a number of linear measurements indicated that: Excepting in the case of Strain 1, the female gametocytes were longer on the average than the males but only in Strain 1V were the females significantly longer than the males. Females of strain 1V were significantly longer than those for Strain 11. Male gametocytes of Strain 1 were significantly longer than those of Strain 1V. An effort is being made to determine morphological criteria that will permit closer estimation of age of gametocytes than we now can make. It is hoped that this will permit a fairer comparison between strains.

13. Study of Exflagellation:

On the whole the technique we have employed to demonstrate maturity of the gametocytes (exflagellation) has not given dependable results. Some preliminary observations have been made with a view of developing a technique whereby the factors influencing this phenomenon can be more reliably controlled.

C. Malaria Therapy.

The inoculations made during the year on the malaria therapy service of the Florida State Hospital, are shown on the next page. Re-inoculations for hyperimmunization are included.

		P. vivax			P. falciparum		P. malariae	
		Takes	Failures	Pending	Takes	Failures	Takes	Failures
Natural inoculation (sporozoites)	Primary	26	11	4	16	11		
	Re-inoc: a) Prev. Failure	4						
	b) Prev. take	3						
Total		33	11	4	16	11		
Aritficial inoculation (trophozoites)	Primary	20	23		29	2		5
	Reinoc: a) Prev. Failure	16	15					
	b) Prev. take	18			9			
Total		54	38		38	2		5

During this period, the use of the McCoy strain of P. vivax has continued, being transmitted through passages 44 to 50 inclusive. In recent passages gametogeny has been poor, and the incidence of infection in our mosquitoes has not been high. The Cuban strain has been artificially propagated at maintenance levels. Our hyperimmunizations have necessitated the repeated artificial inoculation of several convalescents from naturally induced infection, which together with several experiments requiring this method of inoculation, have increased the proportion of artificial inoculations above our usual practice.

The long strain of P. falciparum has been carried on through passages 19-22, although it was necessary to break the continuity with an artificial passage subsequent to passage 22.

The Mexican and Panamanian strains of P. falciparum, and the Jones strain of P. malariae, have been propagated at maintenance levels.

A total of 11 referred patients have been inoculated with the McCoy strain during the year.

D. Insectaries:

The insectaries have been maintained in satisfactory condition, and the colonies of A. quadrimaculatus and A. punctipennis continue to thrive.

Several shipments of quadrimaculatus ova have been made to the Texas State Board of Health and the Army Medical School has been furnished with punctipennis ova and wild female A. crucians.

Infected quadrimaculatus have been furnished to the U. S. Public Health Service.

Ova of A. albimanus have been received from the Gorgas Institute.

E. Quarters:

The completion of an extensive annex to the building in the basement of which our quarters are located, prompted a request to the President, Dr. Edward Conradi, of the Florida State College for Women, for the assignment to the station of the remaining space in the basement of the old wing of the infirmary building. This request was readily granted. The space, being largely interior, has been utilized in the creation of a stock room and a store room, adequate space for both of which purposes we previously lacked.

Transfer of supplies and idle material to these rooms has greatly improved the appearance of the main laboratory.

F. Field Work:

No field work directly under the auspices of the station has been conducted during the period.

G. Instruction:

During the year the following persons have spent one or more weeks at the station for the purpose of receiving instruction in malariology:

Dr. Alberto Ros, Havana, Cuba
Dr. Bustos, Mexico
Miss Mary Hood, Department of Biology, Fla. State College for Women
Dr. Marquez, Mexico
Dr. Idil Kamil. Turkey
Dr. Bernal, Panama
Snr. Berti, Venezuela
Snr. Montisinos, Venezuela
Mr. T. S. Brooks, Dept. Preventive Medicine, University of North Carolina
Mr. George Herrera, Cuba
Miss Florence Mason, Technician, Fla. State Hospital
Mr. Claudius Walker, Technician, Fla. State Board of Health

A special one-week course in the indentification of anophelines was arranged at the request of the State Board of Health. It was attended by the following engineers and inspectors of county health departments, viz:

Mr. Russell Broughman, State Board of Health
Mr. A. C. Newman, State Board of Health
Mr. Burke Chester, Tavares
Mr. F. C. Moor, Jr., Marianna
Mr. Ford Thompson, Tallahassee
Mr. W. R. Hendrix, Tallahassee
Mr. J. B. Miller, Tampa
Mr. F. L. Coachman, Quincy

We have had the following visitors:

Dr. Justin Andrews, Georgia State Department of Health
Dr. Lund, University of Georgia
Mr. C. F. Catlett, Florida State Board of Health
Dr. A. B. McCreary, Florida State Board of Health
Dr. Smith " "
Dr. J. A. Ferrell, International Health Division
Dr. G. K. Strode, International Health Division
Dr. J. E. Elmendorf, International Health Division
Dr. R. M. Taylor, International Health Division
Dr. Paul Russell, International Health Division
Dr. M. C. Balfour, International Health Division
Dr. L. J. Graves, Leon County Health Department
Mr. Norman Taylor, Cinchona Institute
Dr. Fred Bang, Asst. to Mr. J. A. Leprince,
Mrs. Eliz. Bohnenberger, State Board of Health
Dr. Adolph Kappus, University Gottingen
Dr. Fotheringill, Harvard University
Dr. J. de Castro, Cuba
Dr. Humbersky, Slovakia
Dr. Hathaway, Tulane University
Dr. Martin Young, U. S. Pub. Health Service
Dr. Robert Coatney, U. S. Pub. Health Service
Dr. G. W. McCoy, U. S. Pub. Health Service
Mr. L. M. Clarkson, Ga. St. Board of Health
Dr. T. H. Griffitts, U. S. Pub. Health Service
Dr. Gabaldon, Venezuela

On November 18 the station was open from 10 to 12 a.m. for the reception of members of the Florida Academy of Science which was meeting on the campus at this time.

H. Travel, Consultation and Speaking:

From November 30, 1938 to March 10, 1939, M. F. Boyd was absent on a tour in the Caribbean region, during which visits were paid to British Guiana, Venezuela, Panama, Costa Rica, Salvador and British Honduras, in all of which conferences were held with the Health authorities.

From March 22 to March 30, and again from October 19 to 31, M.F.Boyd was absent on trips to Cuba to confer with H. P. Carr.

On April 2 and 3 made a trip to Pensacola in company with Drs. J. A. Ferrell and G. K. Strode, to inspect the control program at that place. Further trips to that place were made on July 26th and August 31st.

A trip was made to Jacksonville on August 28th to pay respects to the new State Health Officer, Dr. A. B. McCreary.

On December 22 a trip was made to Atlanta to confer with Dr. J. A. Ferrell and Drs. Abercrombie and Andrews of the Georgia State Department of Health.

M. F. Boyd has attended the meetings of the following organizations:

a) The Florida Anti-Mosquito Ass'n., Daytona Beach, Apr. 16-18.
b) Georgia Pub. Health Assn., Atlanta, June 8-10. A contribution was made to the program of the latter.
c) Congress of Microbiology, New York City, and meeting of Scientific Directors, I.H.D., Sept. 3-13.
d) Board of Malaria Consultants, Tennessee Valley Authority, Chattanooga, Tenn., National Malaria Committee, Memphis, Tenn., and Army Medical School, Washington, D. C. Nov. 16-30.
e) Florida Pub. Health Ass'n., Jacksonville, Dec. 8.

I. Mr. Donald Lloyd, who served two years as insectary techinician, resigned August 31 to enter Northwestern University Medical School. He is succeeded by Mr. Ben Bridges, Jr.

Miss Myrtle Hobbs, who has been our nurse-techinician at the Florida State Hospital was honorably released at the end of the year, as owing to a re-organization of the hospital laboratory service, it appears undesirable for us to maintain a separate laboratory at that place, although continuing to contribute to the salary of a technician on the laboratory staff who will do our work.

PUBLIC HEALTH NURSING

Ruth E. Mettinger, R. N., Director

Nineteen Hundred Thirty-nine saw the discontinuance of the Work Projects Administration Nursing Service in unorganized counties. At the request of the Work Projects Administration a project was written to give nursing and clerical assistance in counties where health units were established. Nurses were assigned only to clinics, and the clerical assistants assigned to the health centers in the county. This reduced the personnel from seventy-five nurses to approximately thirty-five. Those who could matriculate at the universities offering a course in public health nursing, approved by the National Organization for Public Health Nursing, were either absorbed in the unit, with the purpose of sending them to college at a later date, or were sent to school for the course in public health nursing. Some new nurses, who had deficiencies in their high school, as well as their nursing education, are making up these deficiencies in order to be eligible for a course in Public Health Nursing.

The reorganizing of the State Board of Health nursing personnel took place the first of August; this was a recommendation made by the representatives from the American Public Health Association in a survey of the State. Districts were abolished; six nurses were assigned to units, two were sent to school and two were brought into the central office to assist in organizing the Public Health Committee, and in making surveys in counties, and assisting in establishing health units.

The County Councils, which were organized six years ago by the Bureau of Public Health Nursing, were merged with the State-wide Public Health Committee, however, the activities of these Committees are practically the same as heretofore.

It has been the object of the Bureau of Public Health Nursing to assist with the organization of the nursing service of newly organized health units. Therefore, much of the State Consultants' time was spent in the units. Nurses for these units were recommended by the Bureau of Public Health Nursing to the Health Officers, and six were employed during 1939. In order to give the proper service, they remained in the county from three to four weeks, or longer.

It was found that decentralization has secured more community support and interest; also in building up the attendance at the clinics, therefore, the nurses were requested to live in their district, as it lessens the amount of time spent in travel and enables the nurse to serve more people.

The consultants have found the appraisal form* of great help in balancing the work of the nursing program, and since the Bureau of Public Health Nursing acts in an advisory capacity to all of the nurses in the state, even though they are not employed by the units, a monthly report, provided by this Bureau, is requested from each nurse. From these reports it was interesting to note that 4,366 maternity cases were carried by 57 nurses. It was also learned that over 5,140 communicable disease cases were called to the nurses' attention. Through the local physicians those cases were given some treatment.

For the most part these nurses have worked very diligently in trying to stimulate interest in organizing health units. They have established maternity and venereal disease clinics, and have solicited the interest of the local physicians to assist with the examinations. There have been 829 requests for hookworm containers from these nurses. First Aid classes have been conducted throughout the state, with an enrollment of 137 adult and 113 hight school students.

In order to save time of the nurses and to lessen communicable disease, to safeguard the health of the young and lay a foundation for the adult life, the nurses have taught 1,171 adults the course in Home Hygiene and Care of the Sick, and over 443 high school girls have received instructions in this course.

For those nurses who were unable to attend school, institutes were conducted in January, February and April. A series of four institutes was held by Miss Mary J. Dunn, Regional Public Health Nursing Consultant from the U. S. Public Health Service, on "Program Planning." Each nurse attending the institute was requested to make a community survey of her county, which revealed many facts about the community with which the nurse was unfamiliar. Supervisors continued this study at monthly staff conferences, which has improved the work considerably.

Through the National Society for the Prevention of Blindness, Miss Eleanor Mumford conducted a series of six institutes at strategic points throughout the state. This institute also evolved program planning as it applied to eye health. It pointed out that the preschool child was being sadly neglected, and that too much time was being spent by the nurse in vision testing, and that more responsibility should be placed upon the teacher.

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* American Public Health Association Appraisal form for local health work N. Y., APHA 1938.

In April, Mrs. Charlotte Heilman, Assistant to the National Director of Public Health Nursing of the American Red Cross, conducted six institutes on "Methods of Teaching."

In connection with health education four of the hospitals in the state requested that lectures be given to the student nurses. These lectures were given by the public health nurses either in the unit, or the field advisory nurses from the central office.

One of the health units has an affiliation with the local hospital to provide field practice for student nurses. Each senior student is assigned for a period of six weeks to observe all phases of the work, as well as attend the weekly staff conferences. This is not a course in Public Health Nursing, but merely an introduction in the field of public health nursing.

The Bureau of Public Health Nursing planned the program for the public health nursing section of the Florida State Nurses' Association Convention, as well as the State League of Nursing Education, which was held in Lakeland during November. Several outstanding speakers from Washington and New York were present. Mrs. Eugenia Spalding, from the Catholic University of America, appeared on the State League program, and discussed "Vocational Occupation for Nurses." Miss Mary J. Dunn, and Miss Naomi Deutsch were the main speakers on the public health section, discussing "Criteria of the Public Health Nursing, and Home Delivery Service."

The Director of the Bureau of Public Health Nursing had the privilege of attending the American Public Health Convention which was held in Pittsburgh in October. Much benefit was derived, not only from the lectures, but the contacts made. It is interesting to compare the nursing service of Florida with that of other states.

Anticipating the establishment of the merit system, Miss Pearl McIver was asked to discuss this topic at the Florida Public Health Association meeting held in Jacksonville during the first of December. She outlined very thoroughly the plan which had been worked out, and which every state will no doubt adopt. Dr. Mayhew Derryberry, statistician from the U. S. Public Health Service gave a report on the survey made of public health nursing, and Miss Ruth Heintzelman, from the Children's Bureau talked on "Lay Participation in the Field of Public Health."

The Director was pleased to participate in the two weeks' conference which was held in Gainesville in August, to outline a manual that would be helpful in working out plans for Florida's school health program.

More and more it is found that morbidity service is an important

part of the family health service, and nursing care cannot be separated from the other health needs of the family. This service has usually been administered on a specialized basis, but is now being considered a part of a generalized public health nursing program, to be used mostly as an approach to health education, and teaching some member of the family how to care for the sick.

Due to an indebtedness of the Crippled Children's Commission, this Bureau was requested to assist with the work. A system was established whereby reports were sent to the Director of the Crippled Children's Commission on the home visits that were made, cases that needed hospitalization and clinics were organized through the efforts of the county and district nurses.

Since the finances of the Crippled Children's Commission again enables them to employ nurses, they have requested the Bureau of Public Health Nursing to assist them in selecting qualified nurses for this work, as well as following up the crippled children in the counties, and assisting with the clinics which are being held throughout the state.

As one of the major problems of the Bureau of Public Health Nursing is qualified personnel, three nurses were sent to George Peabody College; one to Columbia University; ten to William and Mary; one to University of Pennsylvania; four to Maternity Center; two to Lobenstein Clinic, and five to Medical College of Virginia.

Four of the above are on the state staff, employed as state consultants.

The nurses sent to Maternity Center had previously had a course at Peabody, and were given a six weeks' course at Columbia University, following the Maternity Center Course, after which they were given one month in the Field Practice Center at Cattaraugus County, New York.

The colored nurse who was sent to Lobenstein has filled a great need in the state since her return. She is assigned to the county health units for two or three months for the purpose of giving more intensive instructions and supervision to the midwives, and following up their cases. Doctors are becoming interested in this project, offering their assistance--in many counties the midwives are allowed to observe deliveries in the local hospital. The colored midwife teacher is gradually eliminating midwives who are too old to continue practicing. Through the social worker they are given old age pensions. An effort is being made to replace them by younger midwives who are high school graduates and are far better prepared to carry on this work.

With the rural population of Florida it is impossible to eliminate midwives, but with the establishment of county health units there is closer supervision and provision for prenatal care, therefore, they are bringing their patients into the clinics and remaining with the patient through the examination.

Five hundred and seventy-five midwives were licensed and registered during the year. In addition to this, eighty who applied for license did not complete their registration. Due to the many unlicensed midwives a survey was made and it was most interesting to note eleven men who had never been licensed were practicing in one county. It is also interesting to observe that three years ago approximately eleven hundred midwives were registered in the state, and in 1939 only five hundred and seventy-five. This shows that people are becoming educated to the fact a physician should be in attendance during delivery.

The State colored midwife teacher assisted with the fourth Annual Series of Farm and Home Institutes which were held during September and October, and she also assisted with the Negro Health Week by giving talks and demonstrations to several communities which requested her.

Several nurses to whom the bureau was unable to give stipends have financed their own public health course and will be assigned to health units.

It is the purpose of the Director of this Bureau to proceed in her efforts to raise the qualifications of the nurses in the state, and to encourage those who have been given scholarships to continue their studies.

MATERNAL AND CHILD HEALTH

William H. Ball, M. D. Director

The Bureau of Maternal and Child Health was organized in 1936 through funds made available to the State by the Federal Social Security Act administered by the Children's Bureau of the United States Department of Labor.

The financial assistance obtained through the Children's Bureau is matched with funds from the state appropriations for the maternal and child health part of the general public health program. These funds have enabled the bureau to increase and extend its program and services during 1939. The director of the bureau, a pediatrician and a Maternal and Child Health Nurse Consultant, and a midwife supervisor and teacher, aid in furnishing medical and nursing consultation and advice to local health departments and communities for strengthening and organizing new, or extending maternal and child health activities. The director and the nurse, on invitation from the health officers, or the local community, will go into an area or county for a period of several weeks for the purpose of studying the maternal and child health problems and organize maternal and child health programs. Also on the staff are: a full time nurse - midwife, and assistant for organizing and directing supervision of midwives.

The activities of the Bureau of Maternal and Child Health are carried on almost entirely in counties having full-time local health departments because it is firmly believed that without a proper mechanism for supervision and follow-up of basic work, which is available only in counties having a full-time health service, that the money and effort expended cannot be used to its fullest advantage.

During 1939 there were 18 counties with full-time local health service. In these county health departments 42 maternal and 41 well-baby conferences were held at regularly schedules times, and places each month. These conferences were held at 70 well-equipped health centers throughout the counties and especially in those rural counties where the need is greatest.

The general program of the Bureau of Maternal and Child Health includes the following:
(For amount of work accomplished see Table XII)

1. Health conferences for maternal, well-baby and pre-school children
2. School Hygiene
3. Dental Hygiene
4. Supervison and the control of midwives
5. Post-graduate instruction of nurses, health officers, and physicians.
6. Immunization for the preventable diseases: diphtheria, small-pox, typhoid fever, pertussis.
7. Maternal Mortality Survey
8. Maternal Delivery Service
9. Maternal-Child Hygiene Education:
    a. Lectures and talks
    b. Motion pictures and exhibits
    c. News articles, pamphlets, leaflets and radio transcriptions
    d. Individual classes in maternal hygiene
    e. School hygiene
10. Nursing service
11. Consultation of physicians
12. Services of physicians and dentists in Health Conferences

It is the aim of the Bureau of Maternal and Child Health to extend these services throughout the state, and especially in many of the new counties which are now contemplating the opening and maintenance of full-time health departments.

Maternal, Well-Baby and Pre-School Children Health Conferences

The health conference sponsored by the Bureau of Maternal and Child Health is a meeting at a health department health center of a public health nurse, a patient, and a physician or dentist. Here the patient receives a physical examination appropriate to the type and is instructed regarding defects found, and of the preventable measures thought necessary by the physician. This instruction is supplemented by the public health nurse in pamphlets, booklets, and information dispensed in mothers' classes and on home visits. At these conferences infants are examined at regular intervals and their parents instructed in the proper methods of feeding, and they are given immunizations for small-pox and diptheria. The same general principles apply for a preschool conference.

The maternal conferences are held at health centers at which time maternal patients are given a complete physical examination, including measurements of the pelvis, a test of the blood for syphilis, and a urinalysis, and other tests as indicated, such as: hemoglobin, hookworm test, tuberculin test, etc. Here the mother is instructed directly by the physician in charge of the conference regarding all the pit-falls of child-bearing. Her condition is checked at regular intervals by the conference physician. The public health nurse supplements these instructions in the

home or at the conference by visual and demonstrative teaching. Also, at this conference the mothers are taught and shown how and what to prepare for the final delivery in the home.

School Hygiene Program

These conferences are held at the schools and an attempt is made to give a fairly complete physical examination of the school child in the presence of the parents so that any defects uncovered may be brought definitely to their attention, and they are impressed with the importance of consulting a physician for the correction of any defects noted. At these school examinations the children are weighed, measured, and the hearing and vision are tested, and if found abnormal they are referred for correction to the family physician.

Dental Hygiene Program

The Bureau of Maternal and Child Health contributes funds to the Division of Dental Hygiene for the education of dental health of the school child and of the prenatal patients. This Bureau contributed funds for the establishment of several dental clinics for indigent children and mothers conducted by local health departments. Twenty dentists were paid in 1939 for $3350; for conduction dental clinics for treatment of indigent mothers and children, or for the treatment of these groups in their offices. (For dental work done see Tabulation Table 3).

These dentists are selected by the local county health officer from a list of available men furnished by the local dental society.

Midwife Supervision

During the past year this Bureau has formulated a code for the regulation and the control of midwives practicing in this state. It is planned to have this code adopted and enforced, thus, elevating standards of the midwives. This department has a full-time nurse supervisor for midwives, who has a nurse-midwife license. This supervisor makes routin trips of inspection throughout the state, examining midwives, making plans of local health departments for their regular monthly classes for midwives practicing in their county. Assisting in this is the full-time state midwife teacher, who visits counties having health departments and makes observation studies of individual midwives practicing. This is done by accompanying the midwife on an actural delivery and observing her technique and understanding of midwifery. At this time the midwife again receives instructions.

Post-Graduate Education

The Bureau of Maternal and Child Health contributes to the postgraduate instruction of the physicians by contributing funds to the Postgraduate Education Committee of the Florida Medical Association in furnishing the service of lecturers in pediatrics and obstetrics for their annual short course of post-graduate instruction.

21 nurses giving satisfactory service in health units who were not qualified as a public health nurse, were given scholarships to various nursing schools of public health in order to render them more valuable to their health department and community.

Immunization For The Preventable Diseases

In all of the conferences, infant, pre-school and school, the value and importance of a protection against the preventable diseases is taught and stressed. In these conferences immunization for these diseases such as: diphtheria, small-pox, typhoid fever, is encouraged and administered.

Maternal Mortality Survey

The survey of maternal deaths was continued. 209 maternal deaths were investigated in 1939. This was done at the request, and in cooperation with the Maternal Welfare Committee of the Florida Medical Association. The homes of midwives, patients, and doctors were visited in the investigations. Tabulation of the information relating to the deaths of these maternal patients was made and was reported by the Chairman of the Maternity Welfare Committee of the Florida Medical Association at their 1940 annual meeting. It is expected that these surveys will be continued for several more years in order to render the statistics and observations more accurate and valuable. From time to time the Maternity Welfare Committee will publish the results of these studies.

Maternal Delivery Service

This department contributed funds for the operation of the home delivery nursing service, in one of the larger counties during the last year. This service was for the indigent normal patient to be delivered in the home. This service consisted merely of the furnishing of the nurse and nursing supplies at the time of delivery in cooperation with, and aiding the physician at the delivery. The patient delivered in this service received adequate prenatal care, consisting of repeated physical examinations, blood test examination, urinalysis, pelvic measurements, etc., and detailed instructions in maternal hygiene by a physician and nurse in the conferences or in the home.

Maternal and Child Health Hygiene Education

a. During the year many lectures and talks were given throughout the state by members of the county health department and the state staff to PTA organizations, schools, and other groups on maternal and child hygiene. These lectures were supplemented by the exhibition of motion pictures on maternal and child health subjects.

b. From time to time articles in newspapers and magazines were published on the hygiene of maternal and childhood health. Many pamphlets and leaflets were distributed through public health nurse during the home visit. Individual group classes in maternal hygiene were held at the conference centers concurring with the maternal conferences. Many talks, lectures, and demonstrations were given in the schools and county health departments throughout the state.

Nursing Services

This bureau contributed 26 full-time qualified public health nurses to the health units for aiding in carrying out the home hygiene instructions and nursing program in the maternal and child health field. The service of a state nursing consultant, a state midwife supervisory, a state midwife teacher were furnished for consultation to health departments and communities.

Consultation By Physicians

Through activities of the health departments physicians were paid fees for consultation furnished to physicians for indigent patients in maternal and child health diseases.

Services of Physicians and Dentists In Health Conferences

Seventy-six physicians and dentists were paid nominal fees for contributing their services for the indigent patients in the maternal, infant, preschool and dental clinics conducted by the various health departments. These physicians and dentists were chosen by the local health officers from a list of available men furnished by county medical societies. (A tabulation of these services is found in table 3).

It is the desire of the Bureau of Maternal and Child Health to extend these services throughout the state and especially in many of the new counties which are now contemplating the opening and maintenance of a full-time health department. The main objectives for the next year are as follows:

1. A state-wide education program in maternal and child hygiene through lectures, radio, articles, and pamphlet distribution.
2. The sponsoring of a state-wide conference on the care of mothers and babies.
3. Financial aid for post-graduate education of physicians who are participating in maternity and child health programs.
4. To continue awarding scholarships to public health nurses for completing their public health training.
5. The approval of the enforcement of the new midwife laws.
6. The inauguration of a state-wide premature infant program.
7. The demonstration study of the anemias occurring in pregnancy.

8. Studies of the deaths of infants and children under five years of age.
9. To offer refresher courses in pediatrics and obstetrics to health officers and physicians who are participating in activities in maternal and child health programs.
10. A cooperative intensive drive on maternal-congenital syphilis.
11. Analysis of maternal and child health problems and programs in communities and local health departments.

DENTAL HEALTH

Lloyd N. Harlow, D.D.S., Director

Several dental health programs were being carried on in various communities in Florida before the establishment of the Bureau of Dental Health. Some have been highly successful, while others have not been satisfactory because of the interference of local politics. The absence of, or inadequate education in the dental health field has not created the cooperation or interest necessary to conduct a good program in many communities. Some have failed because the communities have thrown the burden of caring for the indigent children upon the shoulders of the members of the dental profession rather than depending upon the cooperation of everyone.

Florida's great area with its vast differences of living conditions make it difficult to conduct an indentical dental health program in every county. A survey was made to ascertain the most satisfactory program that could be used to best advantage in all sections of the state. The program sponsored by the Public Relations Committee of the American Dental Association together with the programs of many states have been studied and the ideas applicable to Florida incorporated in this bureau's program.

Too much credit cannot be given the members of the Florida State Dental Society for their assistance and cooperation in planning and carrying on the bureau's dental health program.

The studies made have convinced the director that the inspection program which the bureau has been using should eventually be discontinued and more time devoted to the educational features of a good dental health program.

It is believed that for a sound program it is necessary to first educate the citizens of each county of the need for such a program. Second, that dental clinics for the indigent should be established. These clinics should be local and maintained by the community in which they are located. Where Federal funds are available, the bureau believes in assisting with the establishment of such clinics, but that they should eventually be completely maintained by the local communities. The preschool child should be given preference in all cases. After the establishment of the clinics, the parents of the children and the children themselves should be educated to the need of dental health.

In a survey of the school children during the year, it was found, in counties in which clinics were established to care for the indigent children, a great deal of progress was being made. In counties in which the county health units paid the private dentists for corrective work for the indigent, some progress could be made, but it was not in keeping with the amount of money expended.

In counties where the dentists gave their time and material, it was considered best to go slow with the program as it was unfair to ask the dentists to carry the burden of so large an undertaking.

A survey was made of the children's clinics being conducted in the state (at present there are seven). From this survey the conclusion is that the best method of caring for these children is through the school clinics. In the communities having such clinics, the results are most gratifying. The dentists are well pleased with the arrangements, and know the burden of caring for the underprivileged is upon the people in the community as a whole, and not upon the shoulders of the dentists themselves.

From the experience this bureau has had with the dentists caring for the children in their own offices, and being paid by the Children's Bureau for their time, the method is considered most unsatisfactory.

It is believed that where full-time or part-time clinics are established, sponsored by local dental societies, they can render more and better service at less expense. The Bureau of Dental Health is endeavoring to have such clinics set up in each county of the state. The dental societies in all cases are sponsoring the program.

The bureau has assisted in the inspection of school children and has carried on an inspection program of its own in which over 45,000 school children have been examined. From this survey it is found not practical to conduct inspection programs unless means have been provided to correct the defects discovered.

In making examinations, an effort was made to classify the children into three groups--those able to pay, those not able to pay, and those who were possibly able to pay something. Nurses, school teachers, and welfare workers were all asked to make these classifications; and although they are not absolutely correct, they give a very good cross section of our population. The ratio of those able to pay was 20 percent compared to 35 percent not able to pay, and 45 percent doubtful as to means of paying anything, or even a small fee. This clearly demonstrates the need of finding some means of caring for these children if a sound program is to be established.

At the beginning of 1939, seven dental clinics were in operation. Three clinics, Pinellas, Hillsborough, and Orange Counties, operate in conjunction with the county health units. Dade County operates with the county. Palm Beach County operates from funds obtained by

entertainments sponsored by the Kiwanis Club. The cities of Jacksonville and Tampa have clinics operated by the respective municipalities. In every clinic, the local dental society has a committee with direct supervision, or acting in an advisory capacity.

During the year, Bay County established a clinic in conjunction with its county health department. Hillsborough County has a dental trailer which is making remarkable progress. All clinics are operated either in the school building, in the county health unit offices, or in a municipal building. In all the clinics operated in connection with the county health units, the dentists carry on a dental health educational program. Outstanding among these is the Hillsborough County Health Mobile clinic in charge of Doctor John J. Torres, and Pinellas County which is in charge of Doctor B. C. Forbes. Escambia and Duval Counties have purchased dental equipment and both will start full-time dental clinics the first of January 1940. Escambia County's clinic will be a mobile unit, while Duval's will be operated at the county health unit building. Gadsden and Jackson Counties are making preparation to purchase equipment and expect to have clinics in operation early in 1940.

Conferences were held with the dental organizations over the state urging that clinics for the under-privileged children be established. The director feels that unless some method of caring for these children is found our educational program will not be of the maximum benefit. A great deal of interest was manifested in the areas visited and all are urging the school boards and county commissioners to establish these clinics. Until such time as they are established, the dentists are caring for the children in their own offices. In the majority of cases the dentists are donating both their time and material.

The method of demonstrative education was continued in Wakulla County. This program started last year is to be carried on over a period of years to determine the effect dental corrections will have on the physical, mental, and general welfare of the children. As 1939 was only the second year, definite facts are not yet established; however, marked improvements were noted in the mouths of the children, showing that they are becoming more dental health conscious.

Throughout the year, through the courtesy and cooperation of the Bureau of Public Health Nursing, this bureau's prenatal and postnatal letters and instructions were distributed to mothers and expectant mothers.

In localities having dental clinics, or where the dental organizations are caring for the children, the Honor Roll system was encouraged. This method, together with the half holiday for one hundred percent dental health seems to give the children an incentive to care for their teeth. But in those schools where it was impossible to obtain proper care for the under-privileged children, the use of the system was discouraged.

Mimeographed copies of the dental health program were distributed to members of the five district dental societies in the state. These programs served to awaken the interest of the members of the profession in the need for dental health education. In every school visited by the bureau, copies of the booklet, "Dentistry and Public Health," were left with the teachers and in the libraries; and to the children, the booklet, "The Five Little Pigs," and the dental health song, "Billy-Boy," were distributed.

Papers on Children's Dentistry were prepared and read at meetings of the Northwest District Dental Society and the Central District Dental Society. Talks on dental health were given at the following meetings: St. Petersburg Dental Society, Pensacola Dental Society, Jacksonville Dental Society, Miami Dental Society, Volusia County Dental Society, and Dental Hygienists Association.

In all counties visited, dental health talks were given to the schools, and to a large number of parent-teacher associations and meetings of other civic organizations.

The director and assistant both attended the meetings of the Florida State Dental Society, West Coast District Dental Society, Central District Dental Society, Northeast District Dental Society, the Public Health Association meeting in Augusta, Georgia, and the Florida Public Health Association meeting in Jacksonville; also, the school health conference held in Gainesville for the purpose of making plans for coordinating public health teaching in the schools throughout the state.

The dental health exhibit was enlarged and improved to increase its educational value. During the year it was shown at the following fairs:

DeSoto Exposition and Florida State Fair - Tampa
Lake County Fair - Eustis
Central Florida Exposition - Orlando
Halifax Exposition - Daytona Beach, Volusia County
Tobacco Festival - Quincy, Gadsden County
Jackson County Fair - Marianna
Taylor County Fair - Perry
Florida Public Health Association meeting - Jacksonville

In each instance the exhibits were favorably received. The bureau's dental health literature was distributed in conjunction with the exhibits.

In order to impress school children in an interesting and entertaining way with the necessity of observing dental health and general health rules, the director has written a dental health movie, "Billy's Trip To Health Land," that is produced in sound and color and acted by marionettes. The story has a fairy tale background and the health lessons are taught by the conversation of the school children, the school teacher, and the visiting dentist who takes the children on an imaginary trip to Health Land.

A great deal of time and hard work have gone into the making of this motion picture. After the recordings were completed, the picture was shown to the State Department of Education and its approval secured. The film was then shown to approximately 2000 school children and their reactions noted. It was found that the voices used were not suited to the characters in the picture and it was considered advisable to make new sound. As new voices were going to be used, it was decided to arrange the script so that the sound could be put directly upon the film. This necessitated many changes and correct timing all of which will greatly delay the completion of the picture. However, the film should be ready by late spring and it will then be available for the schools during the 1940-1941 terms.

HEALTH EDUCATION

Elizabeth Bohnenberger, Director
Jean Henderson, Public Relations Consultant

During 1939 the Division of Health Education continued its endeavors to coordinate the health education activities of the bureaus and divisions of the State Board of Health and to assist the county health units with their health education programs.

A program of general health education of the public was also attempted and the media used are explained in the following pragraphs.

Library

The State Board of Health Library is a part of the Division of Health Education and contains 7,000 books and bound periodicals, as well as a large collection of reprints and pamphlets on medical and public health subjects. Full library service is given to all State Board of Health personnel, county health unit personnel, and to any doctor, nurse, or layman interested in public health in the state. No charge is made for this service except actual postage costs if material is mailed.

The Library issues lists of available books, pamphlets and articles on various subjects of interest to the personnel of the State Board of Health and to the physicians and public health workers in the state. Package libraries and reading lists are furnished to various health institutes, classes, and seminars held in the state. Special attention also has been given to work with the Negro physicians in cooperation with their institutes on tuberculosis and venereal diseases.

Increasing interest has been shown in the library service and the private physicians, particularly those from the rural sections of Florida are using the Library more extensively each year.

Publicity

Through the efforts of the Public Relations Consultant publicity about the State Board of Health and the county health units was widespread in 1939 and was carried in practically all Florida newspapers, both weeklies and dailies. Attention was payed particularly to objectivity in all news releases which included weekly associated press Sunday releases over signature of the State Health officer, regular releases to county weeklies and routine spot and feature articles.

Because the news was written in proper journalistic fashion and submitted through correct sources it received excellent placing and timing. Both the Associated Press and the United Press cooperated in this, and featured articles on public health in general were picked up in many of the large papers, as well as the smaller weeklies.

The State-Wide Public Health Committee was responsible for 2,932 column inches of newspaper and magazine publicity in addition to the 31,798 column inches of routine State Board of Health and county health unit publicity. Combining these two figures, the total amount of public health publicity for 1939 was 34,730 column inches as compared with 17,002 column inches during 1938.

Extra curricula publicity was handled for the following annual meetings: Florida East Cost Medical Association, Florida Public Health Association, Florida Anti-Mosquito Association.

Civic Organizations

The health programs of such organizations as the parent-teacher associations, women's clubs, Rotary, Kiwanis, American Legion, Junior and Senior Chamber of Commerce, etc. have been coordinated with the programs of the State Board of Health and the county health units. Particularly the state organizations of such bodies have come to know the health needs and objectives of the official health agencies.

In this connection, the survey of public health entitled "The Health Situation in Florida" made by the American Public Health Association in 1939 has been used. Over 7,000 copies of this survey have been distributed by the Division; the greatest number of these was distributed through the State-Wide Public Health Committee, and those receiving copies have been representative citizens of the state who have in turn circulated their copies widely.

During 1939 all bureau directors and many other State Board of Health personnel made talks before the public. An attempt was made to have a representation on all the large convention programs which would reach influential members of Florida's citizenry. All talks before such organizations were carefully prepared and carried one clear message: the naming of Florida's health problems and the first principle toward their solving, i. e., the establishment of full-time local health service in all portions of the state.

Radio

During the year talks were made frequently on the radio, but this medium of health education has not been used to the extent it will be in 1940. Plans for the coming year include a regular radio program, a staff for which is already being assembled through the cooperation of the Work Projects Administration. Scripts will be written from this source but edited by the State Board of Health personnel and supervised by the Public Relations Consultant.

Publications

FLORIDA HEALTH NOTES, the monthly bulletin of the State Board of Health, continued to be edited in the Division of Health Education, and when the Public Relations Consultant assumed the responsibility of publishing the bulletin, a change in make-up and editorial style was instituted with the thought of making HEALTH NOTES more appealing to lay persons. At that time the circulation was 6,500. By the end of the year 4,000 carefully selected names had been added, bringing the total circulation to 10,500. FLORIDA HEALTH NOTES is now received by people heretofore not acquainted with Florida health problems and by public health workers and school theachers who use the bulletin as study material in health education.

The Division serves in an editorial capacity to the other bureaus in the preparation of papers. Techinical publications of the bureaus are submitted for suggestion as to format and lay-out. Cover designs and illustrations for many of these publications are provided.

The annual reports of the State Board of Health are edited in this Division and also surveys of health conditions in those counties proposing to establish health units are edited and published from the Division.

Pamphlets

Pamphlets for distribution cover the usual communicable and preventable diseases, and largest distribution has been through the local health units.

Especial attention was given this year to pamphlet material on the venereal diseases. The newer publications of the United States Public Health Service have been purchased and widely distributed, as well as those of the American Social Hygiene Association. Venereal Disease Information Supplement No. 6 entitled "The Management of Syphilis in General Practice" was sent to every licensed doctor of medicine in Florida in cooperation with the Division of Venereal Disease Control of the State Board of Health and the Venereal Disease Committee of the Florida Medical Association.

A new pamphlet on hookworm and a 71 page anti-hookworm kit was prepared in 1939 through the efforts of the Public Relations Consultant. The hookworm kit contained outlines for a hookworm eradication program and included news releases, talks before lay groups, and plans for a

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community organization program in connection with the local health unit. News releases were so worded that they could be adapted by the local health officer for use in local papers. This was also true of the suggested talks and radio releases. The kit has been used in several of the health units during 1939 and the consultant on hookworm from the Bureau of Epidemiology found the kit particularly useful in his work with the county health units.

The Division has also cooperated with the national cancer prevention program and with the voluntary tuberculosis associations in the distribution of their literature.

Films

The Division has charge of the lending of all motion pictures on health. The film library has grown considerably during 1939 and purchase of additional films will be made as produced. It is also intended to make a picture on hookworm prevention during 1940.

The films are scheduled mainly to local health units. Projectors for each unit are an important need and during 1939 it was possible for several more of the units to make this purchase. With one exception, all county health units now have a 16mm. sound projector or have access to one.

The Division has a moving picture operator who is also general clerk and library page. This operator is loaned to all bureaus who may wish to show moving pictures of a techinical or popular nature before professional or lay groups. The operator has charge of the inspection, scheduling and repair of the film collection -- a very necessary function where films circulate as widely and as rapidly as those of the Division.

Several of the counties have made moving pictures showing the work of the health units. These have been powerful instruments in selling the health units to the public and it is also planned next year to use these in the schools as part of health instruction.

Exhibits

This Division took over the responsibility for all exhibits which were formerly supervised by the Bureau of Public Health Nursing and it was possible with the help of WPA projects to revamp the current exhibit material during 1939. The county health units and the State Board of Health have had exhibits at many county fairs, conventions, meetings, and institutes.

With the employment of an artist to have charge of this work, much more is expected to be made of this medium of health education. Model posters and graphs and charts for use in school health instruction have been made and it is planned to coordinate this portion of the program with the health instruction units of the State Department of Education.

School Health Services

As a result of frequent talks and plans made by the Director of the Division and the Consultant in Health Education of the State Department of Education, a coordinated school health program between the State Department of Education and the Board of Health was worked out. This plan was put into effect in the summer of 1939.

Previous to 1939 Florida has no coordinated, well-planned program of school health. Some of the counties carried on spasmodic programs of immunization. County nurses did considerable work in the schools and some effort was made by county health units concerning a healthful school enviornment. However, a joint plan of procedure between school and health authorities was not in evidence.

In the summer of 1939 at the instigation of the State Board of Health and the State Department of Education, a group of people met at the University of Florida and prepared plans for Florida's school health program. This plan was published in bulletin form entitled "Plans for Florida's School Health Program."

Five thousand copies were distributed throughout the state by the State Board of Health to lay groups in every county. This was done in order that the tax-payers might have knowledge of school health needs and the necessity for coordinating the school program with the community health program. Five thousand additional copies of the school health plan were distributed by the State Department of Education to school officials, county school boards and school teachers. By the end of the year the school health program was widely known over the state.

The school health plan as outlined is completely coordinated with the community health program. Full-time county health units will formulate their programs around this plan. Staff education concerning the program is proposed for 1940 and to this end, study units built on the plan have been in preparation and will be used in county health unit staff meetings.

State-Wide Public Health Committee

The outstanding public relations achievement of 1939 was the formation of the State-Wide Public Health Committee, dedicated to the purpose of furthering the Florida survey of the American Public Health Association. As the year drew to a close, this organization of some 2,000 leading Florida lay and professional citizens represented one of the strongest forces for public health education in the state and had

gained considerable national attention

Although plans for the State-wide Public Health Committee were formulated in February, it was not until July that organization began in earnest. The Public Relations Consultant was loaned to the Committee by the State Board of Health to act as Executive Secretary and plans were supervised in the beginning by field workers of the American Public Health Association.

To facilitate operation of the Committee, the state was divided into seven districts. Meetings were held in each district to introduce the Committee and describe its function in promoting enactment of the recommendations of the American Public Health Association survey, "The Health Situation in Florida." Because attendance was good and interest keen, a great many county meetings are planned for 1940.

The State-Wide Public Health Committee is an independent organization whose policies are formulated and carried out by the State Executive Board, composed of the following organization presidents: Florida Medical Association, Florida State Chamber of Commerce, Florida Federation of Women's Clubs, Florida Congress of Parents and Teachers, Florida State Dental Society, Florida State Bar Association, the American Legion, Florida Federation of Labor, and Florida Federation of Business and Professional Women. In addition there are eight members-at-large, and the entire group is headed by John P. Ingle, Sr., Jacksonville, as president and Mrs. Malcolm McClellan, State president of the Florida Congress of Parents and Teachers, as vice president.

As a result of negotiations by the State-Wide Public Health Committee, representatives of both the State Board of Health and the State-Wide Public Health Committee, were guest speakers at meetings of a large number of other organizations. Among the more important was the series of five district conferences of the Parent-Teachers Association at which public health was the topic of talks and group discussions at each meeting, sometimes as many as two or three health talks being scheduled for one program. The two topics featured were full-time county health units and Florida's new school health plan.

The increased interest inspired in public health and the program of the State Board of Health by the State-Wide Public Health Committee was reflected in increased requests for speakers for both local and state organization meetings, pamphlets, information, motion pictures, and other media of health education.

Even more far-reaching than the record of publicity were the strides made in promoting new county health units. By the end of 1939, two counties had requested health surveys from the State Board of Health preparatory to inaugurating movements for health units and ground work has been laid for about ten new health units.

LOCAL HEALTH SERVICE

Frank V. Chappell, M. D., Director

The director of Local Health Service was appointed in October and at the same time the Bureau of District and County Health Work was changed to Local Health Service. The director at the same time continued to serve as acting director of Maternal and Child Health until the new director was appointed.

This division of activities made it impossible to be out of the office as much as desirable, but time was found to meet with the county commissioners of a number of counties to talk in regard to the advantages and possibilities of setting up a local health unit. Twelve such visits were made to six counties and the commissioners of four of these counties tentatively agreed to include a certain amount of money in their budgets for 1940-1941 as their share necessary to set up a health department. The director visited all of the local health departments one or more times during the year and offered such help and advice as he was able from time to time to give. All of the units have made very definite progress during the year and nearly all of the counties have issued well prepared and well written annual reports of their activities for which they have every reason to be proud.

It is felt that there has been an awakening on the part of the more intelligent group of the general public in regard to public health, and this has made it much easier than formerly to interest groups in the subject. Almost without exception all groups of citizens and county officials have been most responsive to the plan of using local funds for the setting up of a County Health Unit. It is Believed that by strengthening those units already established these units will sell their program to the adjacent counties, and that the organization of additional units will be accomplished as a matter of course. It is felt that from now on units can be established with little or no effort, faster than it will be possible to supervise, staff or assist them financially.

In the past one of the chief obstacles in the way of smooth functioning of the units has been the rapid turnover in the personnel, especially the health officer. It was resolved this year to put a stop as far as possible, to this practice and try to assist the unit, and the director personally, by insisting that he remain at least a year or longer if possible, before making a change.

A paper titled "Balancing the Local Health Program" was read at the meeting of the Florida Public Health Association in Jacksonville and talks were made before a number of interested groups on the advantages to be derived by a county from a full time county health department. The director was made a member of the postgraduate committee of Florida Medical Association, as a representative of the Florida State Board of Health, to work with the committee on the annual postgraduate course to be held in Jacksonville during July 1940.

The director attended the annual meeting of the Southern Medical Association at Memphis, and attended as nearly as possible all of the meetings of the Southern Branch of the American Public Health Association, and also the Public Health Section of the Southern Medical Association.

During the year four physicians attended the short course for health officers at the University of North Carolina, one at his own expense, and the expenses of the other three were met with Social Security funds. One sanitarian was also sent to the University of North Carolina for a full nine month's course and paid for by the State from Social Security funds and four others went at their own expense for the short course for sanitary officers.

A report of certain of the more interesting activities of the seventeen county health units as reported to the United States Public Health Service for the calendar year of 1939 will be found in the Appendix, table XIV.

VITAL STATISTICS

Edward M. L'Engle, M. D., Director

Since it is not possible to give a statistical report for the same year which is covered by the reports of the other Bureaus of the Health Department, what follows is merely a resume of some of the activities of the Bureau of Vital Statistics for the year 1939. The detailed statistical report, which relates to the year 1938, is being published in a separate volume.

There were added during the year 1939, a total of 92,798 items, divided as follows: Births, 33,059; Deaths, 22,650; Marriages, 27,364; Divorces, 9,725. The total number of records on file as of December 31, 1939, is 1,540,990.

Certified Copies

During the calendar year 1939, 9,464 certified copies of birth, death and marriage certificates were issued. Since this Bureau receives only memoranda relating to divorces, naturally no copies of divorce decrees were issued. Of the total certified copies issued, 1,255 were issued without the payment of the fee.

A total of 24,503 notices of birth registration were mailed to new mothers. In the past, many of these notices were returned undelivered because of incomplete or incorrect address. It is hoped that this difficulty will be largely overcome by the inclusion on the new form of birth certificate of the requirement that the mother's mailing address, in addition to her usual place of residence, be shown on the certificate.

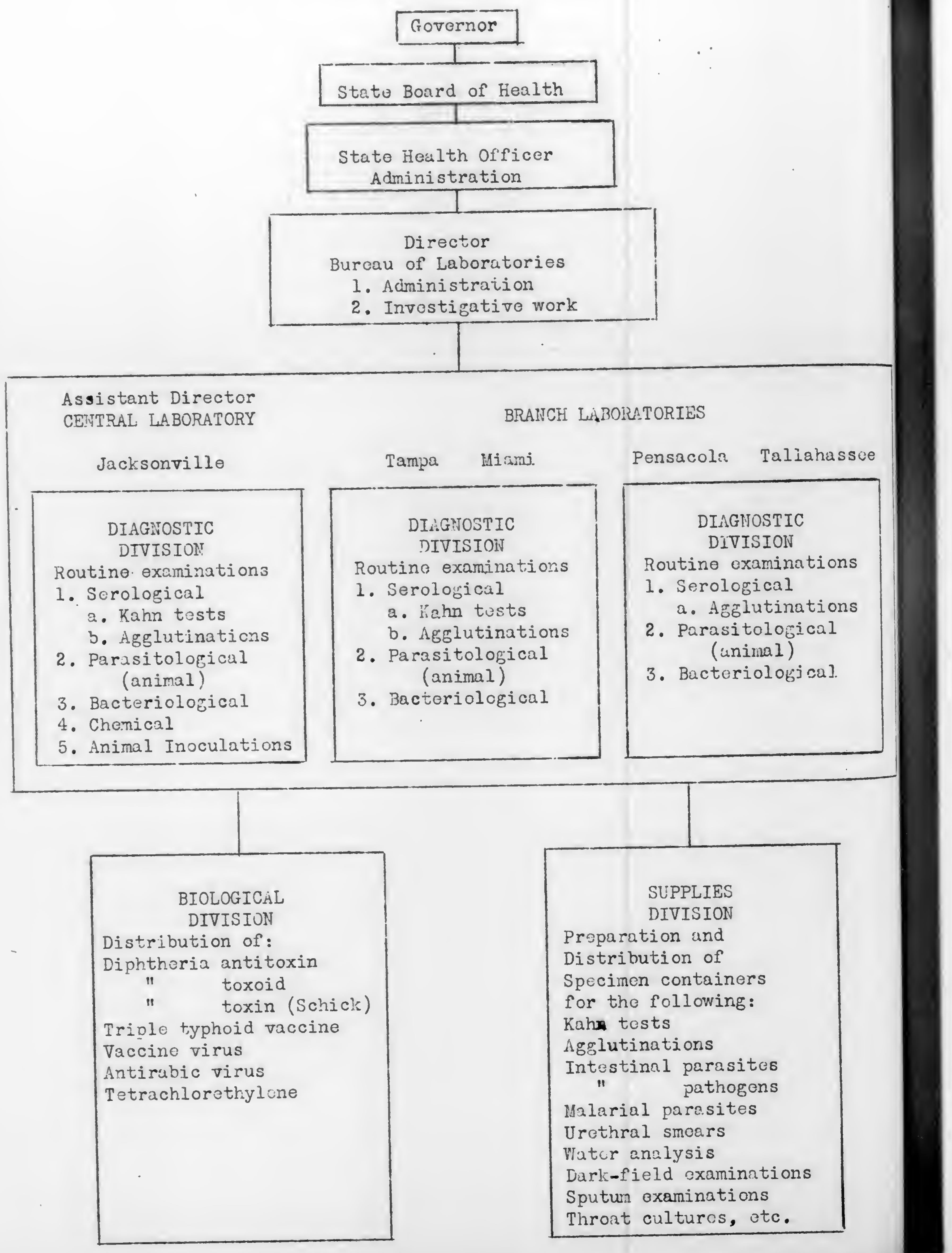
Annual Registration - Healing Arts

Persons holding licenses to practice in Florida registered with the Bureau of Vital Statistics, as required by law numbered 3,189. Of these, 2,267 were Doctors of Medicine; 408 Doctors of Osteopathy; 212 Doctors of Chiropractic; 190 Doctors of Naturopathy; and 112 Chiropodists.

The volume of routine work increased in 1939 by 9% over 1938 and a new activity was inaugurated. This is a cooperative arrangement with the Social Security Board by which the Bureau of Vital Statistics and the local registrars furnished the Social Security Board with immediate proof of death of persons holding Social Security account numbers. The Bureau believes it is an obligation properly assumed to be helpful to the Board in its security program and it is a pleasure to be able to record that the Board has shown a sympathetic understanding of the added burden of work placed on the Bureau and is assuming its share of the added expense entailed in this program.

Assistance is still being received from the Work Projects Administration for work on the records. The work is adding to the usefulness of the records and without this assistance, could not otherwise have been carried out.

Organization of Bureau of Laboratories
Florida State Board of Health



LABORATORIES

J. N. Patterson, M. S., M. D., Director

The annual report of the activities of the Bureau of Laboratories for the year 1939 is submitted in tabular form below and also in tables in the appendix.

Table A shows the distribution of the work among the five laboratories. There was a gross increase of 14 per cent over last year in the number of tests performed. The greatest increase occurred in the work of the central laboratory and increases of a lesser degree were noted in the work of the larger branch laboratories located in Tampa and Miami. A rather marked decrease occurred in the number of examinations performed by the smaller branch laboratories located in Pensacola and Tallahassee. The decrease in their work was due to the transfer of Kahn tests to the central laboratory. This change became effective December 1, 1938.

TABLE A
Examinations made in the laboratories
during the year 1939

LABORATORY	DIAGNOSTIC	MILK AND WATER	TOTAL
CENTRAL			
Jacksonville	297,063	8,951	306,014
BRANCHES			
Tampa	88,289	2,411	90,700
Miami	74,436	6,586	81,022
Pensacola	13,785	881	14,666
Tallahassee	9,245	354	9,599
TOTAL	482,818	19,183	502,001

Table B on the next page shows the distribution of the work in the different laboratories by months. It reveals again the striking seasonal variation in the work of the Miami laboratory and shows the necessity of additional help in that laboratory during the winter season.

TABLE B
Total number of examinations made
by months during the year 1939

	JACKSONVILLE	TAMPA	PENSACOLA	MIAMI	TALLAHASSEE	TOTAL
January	24057	7967	1084	9892	248	43248
February	23031	6969	1346	6751	418	38515
March	26125	7778	1277	6059	529	41768
April	22895	6182	1000	4828	524	35429
May	24684	8399	643	5219	611	39556
June	23341	7012	1150	4771	686	36960
July	23191	6628	1320	4840	699	36678
August	26320	7525	1800	4929	670	41244
September	28778	6778	1469	5873	1276	44174
October	30424	9276	1216	9022	891	50829
November	28734	8813	1479	8481	1445	48952
December	24434	7373	882	10357	1602	44648
TOTAL	306014	90700	14666	81022	9599	502001

Table C on the opposite page lists the distribution of biological products by months. The seasonal incidence of the different diseases can be estimated by a study of this table. There has been a substantial decrease this year over the preceding year in the amount of diphtheria antitoxin and rabies vaccine used. However, the quantity of typhoid vaccine distributed during 1939 was more than double that of 1938. Fifty thousand capsules of tetrachlorethylene for treatment of hookworm were distributed last year by the laboratories. A charge of $5.00 per complete course of 14 antirabic treatments has been made to all patients with the exception of indigents. The amount collected for these treatments during the year was $1,150.00.

SYPHILIS

A substantial increase will be noted in the number of specimens submitted for Kahn tests which are tabulated in Table (summary) in the appendix. Due no doubt to the extensive campaign being waged against syphilis by the U. S. Public Health Service, the State Board of Health and other agencies there was an increase amounting to approximately 50,000 specimens over the preceding year. There was an increase of approximately the same

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TABLE C

Biologicals distributed during 1939

	Diphtheria Antitoxin							Purified Protein Derivative Tuberculin			
								100 test pkgs		10 test pkgs	
	1000 units	5000 units	Schick	Toxoid	Typhoid Vaccine	Vaccine Virus	Anti-rabic Virus	1st str.	2nd str.	1st str.	2nd str.
Jan	31	8	6460	3920	2850	2740	112	8	8	35	42
Feb	49	4	3930	2110	7840	2500	76	41	39	68	55
Mar	75	2	9040	4360	15300	4870	92	74	72	175	89
Apr	28	6	4140	3520	13780	3350	123	69	27	13	16
May	51		1540	1420	12580	1260	97	105	104	8	8
June	49	11	2610	4350	9460	2790	84	59	59	9	7
July	12		620	1000	5460	1610	68	41	34		
Aug	43	5	1550	2660	4080	2570	64	185	168	2	2
Sept	59	5	6020	2920	4520	1900	66	54	34	41	26
Oct	41	5	5340	4200	2960	2300	63	33	37	33	23
Nov	41	6	8080	3180	3280	1990	28	101	95	13	14
Dec	39	7	2030	3740	1160	1990	40	32	31		
TOTAL	518	59	51360	37380	83270	29870	913	802	708	397	282

number of specimens in 1938 over the number examined in 1937. Both the Kahn presumptive test and the Kahn standard test were run on every specimen received so that in reality there was an increase of approximately 100,000 tests. However, as each specimen was reported only as Kahn positive, doubtful or negative, the two tests were recorded as one. Actually 580,562 Kahn tests were performed.

The central laboratory and Tampa and Miami branch laboratories performing the Kahn presumptive and standard tests follow in strict detail the technic of each test as laid down by Dr. Kahn. Two serologists in each of the three laboratories doing these serologic tests have had special training in the author's laboratory.

The central laboratory again entered the Evaluation Test conducted by the U. S. Public Health Service and once more our laboratory was approved for the performance of the Kahn test. During the last two months of the year the central laboratory, with the assistance of Dr. Kahn's laboratory, began a series of monthly evaluation studies of the branch laboratories. The results of these studies showed a high degree of correlation in the readings recorded by the different laboratories.

Within the past year a dark-field microscope has been added to the equipment in each laboratory. Specimen container outfits for submitting chancre fluid in capillary tubes and on glass slides, as well as blood for serologic examination, are distributed upon request.

GONORRHEA

The diagnosis of gonococcal infections by cultural methods has been added to the routine of the central laboratory. The technic advocated by Carpenter and his associates has been adopted. It is planned to institute culturing of gonococci as a routine procedure in the branch laboratories during the next fiscal year.

TUBERCULOSIS

The central laboratory has adopted a method of concentration of sputa before examination. Staining by the steaming procedure has been replaced by the cold method of staining. The central laboratory also performs guinea pig inoculation upon request of the physician.

AGGLUTINATION TESTS

The agglutination procedure adopted last year has met with wide favor among the physicians. It has done much to re-establish the confidence of many physicians in the work of the State Board of Health Laboratories. This fact was brought out strikingly in the Section on Internal Medicine at the annual meeting of the Florida Medical Association held in Daytona Beach, April, 1939. All Laboratories report a steady rise in the number of specimens submitted for agglutination tests.

DIPHTHERIA

Potassium tellurite media has been added to the armamentarium of the central laboratory and has been an invaluable aid in obtaining a pure culture of diphtheria bacilli, when indicated, before doing a virulence test. Virulence tests are only performed in the central laboratory as the branch laboratories have no facilities for housing animals.

PHYSICAL EQUIPMENT

During the past year rapid strides have been made in replacing worn out and obsolete equipment with new and modern equipment. The Miami laboratory, which was especially in need of new equipment, has been re-equipped as follows: International centrifuge #2, large Kelvinator refrigerator, Precision water bath, Spencer binocular microscope, Zeiss

microscope light, Kahn reading light, Quebec colony counter, automatic pipetting machine, Bausch and Lomb dark-field microscope and light, and a Royal typewriter. A Kahn shaking machine in good condition was transferred from the Pensacola to the Miami laboratory.

The central laboratory obtained the following new equipment: A large Precision water bath, 3 Spencer binocular microscopes, 2 Zeiss microscope lamps, Spencer microscope lamp, Coleman pH electrometer, International centrifuge #2, 2 automatic pipetting machines, Bausch and Lomb dark-field microscope, 4 Royal typewriters, Quebec colony counter, Kahn reading light, and a large hot air sterilizer. A large lead acid bath with lead baskets and block and tackle arrangement to lift the baskets was designed by us and built by the Armour Plant from scrap material without cost to the laboratory.

The Tampa laboratory received the following new equipment: Dark-field microscope, Spencer binocular microscope, Zeiss microscope light, Precision water bath, Quebec colony counter, and a Royal typewriter.

The Pensacola and Tallahassee laboratories each received a Bausch and Lomb dark-field microscope and light.

The physical equipment of the laboratories is now in good condition. Expenditures in the future will be more evenly distributed as henceforth it will be necessary only to replace equipment as it wears out. Any large expenditure of money will be necessary only if new tests requiring expensive equipment are adopted in the future.

PERSONNEL

Within the past year the following personnel has been added to the staffs of the different laboratories as follows: Central laboratory: 2 junior bacteriologists, 2 typists and 2 dieners; Tampa Laboratory: a junior bacteriologist and a typist; and Miami laboratory: a serologist and a typist. Of these skilled technical workers one has an M. S. degree, two a B. S. degree and the other a B. A. degree. This increase in personnel has been a big step forward in relieving the overload carried by the workers and has permitted the laboratories to give more prompt reporting without sacrificing accuracy.

Six serologists availed themselves of the opportunity for two weeks advanced training in Dr. Kahn's laboratory within the past year. In addition a senior bacteriologist from the central laboratory studied dark-field procedures for a similar period of time in the U. S. Public Health Service laboratory in Hot Springs, Arkansas.

Considerable progress has been made within the last six months in obtaining a fair salary scale for the skilled technical workers. However, further progress must be made before the laboratory budget is large enough to permit payment of salaries for skilled workers commensurate with their training, ability, quality of work, and length of service.

BACTERIOLOGICAL EXAMINATIONS OF WATER

As Conducted by the Central Laboratory, 1939

	PUBLIC SUPPLIES			PRIVATE SUPPLIES			BOTTLED WATER			MISCELLANEOUS			TOTALS
	Good	Doubtful	Poor	Good	Doubtful	Poor	Good	Doubtful	Poor	Good	Doubtful	Poor	
Deep Wells	1812	205	64	370	68	40	224	17	3	-	-	-	2803
Shallow Wells	438	57	11	862	228	173	229	13	3	-	-	-	2014
Springs	6	1	-	2	-	2	156	18	20	-	-	-	205
Dug Wells	1	-	-	21	26	62	-	-	-	-	-	-	110
Surface Treated	423	105	9	-	-	-	-	-	-	-	-	-	537
Surface Untreated	64	23	58	25	69	74	-	-	-	-	-	-	313
River Water Oyster Beds	-	-	-	-	-	-	-	-	-	43	11	72	126
Stream Pollution	-	-	-	-	-	-	-	-	-	10	8	14	32
Sewage Plant Effluent	-	-	-	-	-	-	-	-	-	-	-	2	2
Cistern	-	-	-	-	38	40	23	-	-	-	-	-	101
Unknown	-	-	-	14	1	2	-	-	-	-	-	-	17
TOTALS	2744	391	142	1294	430	393	632	48	26	53	19	88	6260

Good - Results as indicated by Presumptive Test - no evidence contamination.
Doubtful - Results as indicated by Presumptive Test but which failed to confirm as organisms of the Coli-Aerogenes Group.
Poor - Results as shown by presence of organisms of the Coli-Aerogenes Group in completed test.

DRUG INSPECTION

M. H. Doss, Chief Inspector

The Bureau of Drug Inspection, Narcotic Service, is under operation with five officers, four state inspectors, and one police officer assigned by the city of Jacksonville at no cost to this bureau. During the year 1939 the arrests and prosecutions numbered 33. Violations corrected without legal action numbered 16, and narcotic addicts committed to the State Hospital totaled 2.

The open inspection of drug stores totaled 3,752; drug stores registered for the fiscal year 1939-40 totaled 758; investigations conducted totaled 149; and by order of the State Board of Pharmacy the license of 1 pharmacist was confiscated and confiscation orders from the board in which no return was made numbered 1.

A definite set-back to narcotic control was an act passed by the 1939 legislature which prevents any patient from entering the state hospital unless suffering from a psychosis; this prevents narcotic addicts from entering. Many simply criminal violations by those addicted to the use of narcotic drugs were handled by forcing the guilty party to enter the hospital for treatment until free of the drug habit. This bureau has always considered this constructive narcotic law enforcement since it is obvious that the ultimate aim of narcotic control is a state free of narcotics, except those narcotics used in the legitimate practice of medicine.

A more thorough understanding of the provisions of the Uniform Narcotic Drug Act and a stricter enforcement of its provisions in view of controlling the use of narcotics was started in 1938 under the assistance of the office of the Attorney General, who has ruled that naturopathic physicians and chiropractic physicians were not qualified according to state law to prescribe, dispense and possess narcotic drugs. An appeal was taken by the naturopathic physicians to the Federal Courts, Southern District of Florida as well as the United States Circuit Court of Appeals at New Orleans, Louisiana.

At this time no court action has been taken by the chiropractic physicians with reference to this ruling. These rulings of the Attorney General leaves only the regular doctors of medicine and the osteopathic physicians qualified according to state law to prescribe, dispense and possess narcotic drugs.

It is hoped, with the co-operation of the pharmacist, medical doctors and osteopathic physicians that this strict enforcement of the Uniform Narcotic Drug Act will continue.

ACCOUNTING

G. Wilson Baltzell, Auditor

The following funds passed through the State Board of Health during fiscal year beginning July 1, 1938 and ending June 30, 1939:

	Receipts Including Balances From Last Fiscal Year	Disburse-ments	Balance June 30 19 39
State Board of Health Legislative Appropriation	253,386.61	253,363.89	22.72
U. S. Public Health Service - Title VI	144,927.28	135,097.51	9,829.77
U. S. Public Health Service and Cities for Venereal Disease Control	41,355.00	34,749.29	6,605.71
Children's Bureau for Maternal & Child Health	106,727.62	95,267.39	11,460.23
SPECIAL FEES			
Centralization of Marriage and Divorce Records	19,620.18	18,005.32	1,614.86
Registration of Doctors and Midwives	7,545.98	6,163.26	1,382.72
Certified Copies of Birth and Death Certificates	11,694.93	9,491.91	2,203.02
Drug Store Inspection Fund	8,307.49	7,935.18	372.31
County Health Units - County and City Funds	115,643.95	115,375.69	268.26
Rockefeller Foundation - Division of Malaria Research	13,390.00	13,285.91	104.09
Rockefeller Foundation - Malaria Control Studies Escambia County	3,435.11	3,435.11	
	726,034.15	692,170.46	33,863.69

Financial reports are in accordance with the fiscal years of the State of Florida and Federal Government, and not the calendar year.

The above are grand totals for each Project and Activity. A detailed report consisting of 87 pages covering every Department and Division of the State Board of Health and affiliated activities, including County Health Units, has been published for the above period and will be forwarded upon request.

As this financial resume for the fiscal year 1938-1939 is incorporated in the annual Report of the State Board of Health for the calendar year 1939, there are no financial transactions shown for the last six months of 1939. Therefore, it might be in order to recite that the legislature of 1939 appropriated the following amounts to the State Board of Health for the next two years beginning July 1, 1939: Salaries $103,500.00, Necessary and Regular Expenses $121,500.00, Maintainance of Health Units $50,000.00, For Prevention of Venereal Diseases $38,00.00; and the U. S. Public Health Service allotted for 1939-1940, $155,297.00 under Title Vl of Social Security Act and $68,675.00 for Venereal Disease Control; and the Children's Bureau total of $86,913.01 for Maternal and Child Health Services and Training.

All Federal unexpended balances are carried over to next fiscal year and added to the annual allotments, thereby increasing the budget provisions for ensuing year.

ENGINEERING

George F. Catlett, Director

At the beginning of the year 1939, the Bureau of Engineering had the following personnel: a director and chief engineer, four assistant engineers, a milk sanitation specialist, a shellfish sanitation specialist, six sanitary officers, three WPA sanitation and malaria control supervisors, a draftsman, a secretary and two clerk-stenographers.

Functions

Engineering personnel in a public health organization is concerned with the **environmental** factors, the structures and machinery of utilities that, if improperly constructed and operated, will cause the transmission of disease. Medical science has demonstrated that so-called "excreta-borne" diseases--typhoid fever, hookworm disease, dysentery, diarrheal affections, etc.--are transmitted by the improper disposal of excreta. Thus it becomes an engineering problem to devise means of preventing these diseases.

With this end in view, water supplies are constructed, and, where necessary, water purification plants are properly constructed and operated. Sewerage systems are installed and where these are not provided, other devices such as the privy may be used. Where necessary, sewage treatment plants are required to be properly installed and operated. All of this is to the end that excreta shall not reach the public water supply, the milk supply, or foods that are to be eaten by the public. Since hookworm disease transmission is due to pollution of the soil with human excreta, utilities and special devices must be so constructed and operated that they will keep the excreta from the soil.

As food improperly handled, prepared, and processed is known to cause sickness and transmit disease, plants for the preparation and and structures for handling such foods must be correctly equipped and operated.

Improper handling of milk has caused the transmission of many diseases. Milk plants with their sterilizing, pasteurizing, and other intricate equipment and machinery must be properly operated.

Medical science has demonstrated that malaria, yellow fever, and dengue fever are transmitted by certain types of mosquitoes, and to control these diseases, breeding of those mosquitoes must be eliminated.

For such control, the measures utilized--drainage, filling, screening, and the systematic application of larvicides--are distinctly of an engineering nature.

Typhus fever is transmitted by rats infected with fleas harboring the disease organisms. To control the disease, there must be rat and rat-breeding control and this involves necessary special features in the construction of building as well as the systematic use of poisons.

Many epidemics have resulted from taking shellfish from polluted waters, and measures must be taken for the control of this situation.

All such work involves knowledge and experience of common engineering measures and knowledge of the fields of biology and chemistry, as many of the processes in connection with sewage disposal, water purification, milk handling and food processing are bio-chemical in nature and involve structures and machinery for applying these processes.

Engineering Bureau in the State Health Department

Modern public health practice and the policy followed in Florida as well as in other States, involves the formation of local health units, upon whose personnel rests the responsibility for carrying out directly the public health work in their jurisdiction. From an administration point of view, only two officers may be considered--the State Health Officer and the County Health Officer (in some cases City Health Officer). The Director of the Bureau of Engineering, like other Bureau or Division directors, is a staff assistant to the State Health Officer, and his relation to the County Health Officer is only as part of the office of the State Health Officer. Under such considerations his activities may be defined as:

(1) Selection and development of personnel to be made available for appointment by the County Health Officer as Sanitary Engineer or Sanitary Officer.

(2) Assistance to the County Health Officer in the development of his Sanitary Officers.

(3) Advisory service and technical assistance to the County Health Officer as he may require.

(4) Furnishing assistance to local health officers or municipalities in co-operation with the health officer, including service on certain highly technical activities where a local health organization or small municipality cannot afford the services of a properly qualified man.

(5) Responsibility for certain activities that are of a Statewide nature and overlapping the jurisdiction of more than one local health organization.

The situation regarding these several responsibilities may be briefly discussed.

Selection of Sanitary Personnel: The qualifications of the sanitary officer in a county organization or of a man to be trained or developed for such a position have been very definitely prescribed by the Conference of State and Territorial Health Officers, the U. S. Public Health Service, and other agencies. There are, of course, difficulties in the way of getting in all cases ideally qualified men. Small and less wealthy counties can not afford to pay salaries that would interest such men, and possibly the duties are not so exacting as in larger counties. Also, when one well qualified man is secured in a large county, other personnel, with less technical qualifications, may be added. It can not be too strongly emphasized that care should be exercised in these selections and ~~minimum~~ certain qualifications adhered to. This is the basic need if sanitation is to make satisfactory progress throughout the State.

Development of Personnel: Due to the fact that with the numerous new health units beginning in the State, the sanitary officers are men with little or no previous experience, it is particularly important that systematic attention is given to their development.

Technical Assistance: The county health officers, to a certain extent, call upon the Bureau of Engineering for assistance in the more technical phases of their work.

It is urgently recommended that through the Bureau of Local Health Service, county health officers be induced to lay out a definite, well-balanced program for their sanitary officers, in co-operation with the State organization. This should be done with consideration for the relative importance of the various sanitation activities in each county in question, and help that may be available from the State organization. In this way, priority will be established for the more important activities, the county sanitary officers will not undertake a multitude of things beyond their power to carry out successfully, and the Bureau of Engineering will be able to plan its own program of assistance to various county organizations.

Activities

Activities with which a Bureau of Engineering may be concerned are listed as follows:

(1) Public water supplies
(2) Sewerage and sewage disposal
(3) Milk sanitation
(4) Stream pollution
(5) Industrial wastes
(6) Disease-carrying mosquito control
(7) Shellfish, including crab and lobster meat production
(8) Rodent control
(9) Home sanitation, including water supply, excreta disposal, screening, etc.
(10) School sanitation
(11) Swimming pools
(12) Tourist camps

(13) Food canning plants
(14) State institutions
(15) Disaster relief

Public Water Supplies

The most serious and the earliest-recognized disease epidemics caused by poor sanitation were associated with public water supplies. They have great significance as media for the transmission of disease because every man, woman, and child uses a public water supply. A large factor in reducing epidemics from this cause is the fact that most efficient methods and equipment have been developed for the protection and purification of water supplies. However, eternal vigilance is still required. Should an epidemic occur in a Florida municipality, where great dependence is placed on the tourist business, the catastrophe would be more serious than under ordinary conditions.

In Florida, as is the case in most States in the Union, a statute which gives the State Board of Health responsibility and supervision over the waters of the State, requires that plans be submitted and approved by the Board before construction is started on installation, extension, or alteration of a water or sewerage system, and empowers the Board to order necessary changes, alterations and improvements. This statute, passed by the 1929 Legislature had a defect that seriously questioned its validity. The error was corrected by the 1939 Legislature.

In carrying out this provision, it is necessary to watch constantly all systems for weak features that may exist in the water supply or purification plant and in the operation of these. Continuous visits and inspections are necessary. Should such defects occur, it is necessary to promote early correction. Larger cities are able and do have technically trained men for the operation of the water works, but smaller cities are not able to furnish that service. It is customary practice, therefore, for the State Health Departments to render considerable assistance in such cases.

Florida has 242 public water supplies. Of these, 37 have softening and purification plants and 31 others have some treatment such as aeration, chlorination, or lime stabilization. The remaining 174 have no treatment. Some of these are from suitably constructed wells, securing water from deep-seated sources. Others are derived from lakes or shallow ground water which need some protective treatment if they are to be termed safe. Many of the so-called deep-seated supplies are obtained from wells that are drilled to an adequate depth but are cased only for a short distance.

Water treatment plants are quite complicated installations. The processes employed are chemical and biochemical, and they can only be operated safely under a technically-trained operator, with a laboratory

where he can perform the required daily chemical and bacteriological tests needed to control the plant. Laboratories have been furnished at Tampa, West Palm Beach, and Orlando for a number of years. Quite recently, to this list have been added six plants. Plants without such facilities, are located in small municipalities which are hardly able to afford the service. For example, Belle Glade has a very difficult water to treat, fully as difficult as that used at Tampa. Tampa employs a chemical engineer and the entire services of an analytical chemist are used in the plant laboratory. Belle Glade can not afford this service.

Other plants depend entirely upon samples tested by the State Board of Health Laboratory. Samples are submitted monthly from treated supplies or those having defects in protective measures. On a majority of the supplies, samples are only sent every three months. It is more usual practice to submit samples from all supplies monthly and even oftener from suspicious ones.

In order to guard these water supplies properly, it is necessary that the Bureau of Engineering keep in constant touch with the municipalities to insure that defects are corrected. Alterations to water supplies or water purification plants, in most cases, involve considerable financial outlay which the municipality can not always arrange. Thus, considerable time has to be spent in visits, consultation, and correspondence with authorities before improvements can be secured.

During 1939, plans were approved for improvements or installations at Jacksonville, Lake Wales, Riviera, Tallahassee, Hobe Sound, Sanford, Belle Glade Camp, Ft. Clinch Park, Highlands Hammock Park, and Dixie Court at Ft. Lauderdale. Minor improvements were secured on other supplies.

An important consideration in the protection of water supplies is the practice in Florida of disposing of wastes into the underground waters through drainage wells. The statutes forbid this except with a permit from the State Board of Health. It has been the policy to refuse such permits for sewage, but to permit the discharge of storm water, cooling water from condensers, and innocuous wastes. During 1939 24 permits were granted after investigation. Miami disposes of its storm water through 150 of these wells.

A most important piece of work in connection with water supplies was the Survey of Water Resources in Southeastern Florida begun in 1939. For years, the Miami area has been greatly concerned with the problem of an adequate source of water supply for that rapidly growing section. However, definite basic data regarding underground and surface sources has been lacking, and the collection of such data was obviously a very expensive undertaking. Largely due to efforts of the present Mayor of Miami, Alexander Orr, Chairman Abel Wolman of the National Water Resources Committee became interested in the problem. However, the Federal agency would not co-operate in the project unless the survey was broadened not only to cover the problem of public water supplies, but all interests having to do with water resources. It was estimated that the survey would cost about $300,000 and funds were available to meet half this amount provided local and state agencies would raise the balance.

In June, 1939, seven of the fifteen wells supplying Miami with water became salt, bringing the whole matter to a head. Governor Cone appointed a committee of State and local representatives to work with the Federal agencies. The Director of this Bureau was one of the appointees. This larger committee appointed a smaller executive or steering committee headed by Alexander Orr as Chairman, and Ben Friedman who was elected as secretary. The Director of this Bureau was selected as a member of the steering committee. The necessary funds were raised by Miami and other municipalities in the area, and some State funds were made available for matching purposes. Federal agencies co-operating were the U. S. Geological Survey, the Bureau of Agricultural Economics and Soil Conservation of the Department of Agriculture, and the Army Engineers. Besides the problem of water supplies there was also included irrigation and other agricultural needs of the Everglades, fire control, soil erosion, flood control and irrigation, wild life conservation, etc. Mr. Stanley Wright was employed as co-ordinator, funds being supplied by the National Resources Committee and the State Planning Board. The State Planning Board has sponsored the entire project.

The survey is of great importance to the public health, and the data to be derived will be of value to the State Board of Health in connection with public water supplies, water pollution control, and mosquito control.

Public Sewerage Systems

The statute referred to above, relating to water supplies, gives the same responsibility to the State Board of Health in regard to sewerage systems. Florida is badly in need of sewage treatment plants in certain congested areas, particularly in the cases of Miami, Tampa, and Orlando. There is considerable need for them among the coastal towns in Pinellas County. Clearwater began the installation of a modern treatment plant, and this action will serve to encourage other municipalities. The Bureau of Engineering spent a great deal of time in promotion of this step and in making extensive surveys of polluted waters in the area. Similar service was given Tampa in connection with their problem, and some work was done on Biscayne Bay.

Sewerage plans were approved for Clearwater, Jacksonville, Sanford, Jacksonville Beach, Lakeland, West Palm Beach, Tampa, and Ft. Lauderdale.

A considerable number of special plans for septic tank and drainage field installations for schools, tourist camps, and institutions, were furnished by the Bureau.

Stream Pollution

Stream pollutions is quite a problem in the State in connection with shellfish sanitation and bathing beaches, as well as sanitary nuisances. Surveys of these areas constitute an additional problem. The surveys include investigation and study of all sources of pollution, following which samples must be secured for laboratory examination under varying conditions of tide and wind. A part of the laboratory work is accomplished by sending samples to the Bureau of Laboratories, and a part, by engineers in the field.

Maps are distributed by the Bureau defining areas too greatly polluted for the taking of shellfish. Considerable survey work was done on this during 1938, and maps revised as of January 1, 1939. Some follow-up work was performed in 1939.

There is still a great deal of work needed along this line if personnel is available.

Milk Sanitation

Report is made of the milk sanitation work in 1939 by Dr. Williamson:

At the end of 1938, thirty-seven Florida cities had adopted the United States Public Health Service Milk Ordinance and Code, commonly known as the Standard Milk Ordinance. Only seven of this number had developed their program sufficiently to merit inclusion in the accredited list published semi-annually by the U. S. Public Health Service. In order to be listed, the individual menicipalities must make a rating of 90% or above on both their raw and pasteurized milk supplies. This rating is made by a State Board or a U. S. Public Health Service representative who uses the U. S. Public Health Service Milk Ordinance and Code as the yardstick in evaluating each supply. During the next twelve months, five additional Florida cities came under the Standard Ordinance banner, making a total of forty-two cities in the State operating under the Public Health Service Milk Ordinance and Code at the end of 1939.

The principal aim of the State Board of Health in its milk program is to promote adequate and uniform milk regulations throughout the State, together with suitable health personnel to enforce them. It is believed that the uniform adoption of a nationally-recognized ordinance such as the Standard Milk Ordinance, together with the establishment of properly constituted county health units is the quickest and best means to this end. It is further believed that the Grade "A" label should actually mean just what it implies.

Cities not properly enforcing the Standard Ordinance unwittingly do a serious injustice, not only to themselves, but to the Ordinance as an institution and to the State milk program at large. For this reason, cities making little or no attempt to enforce the Standard Ordinance are being removed from the official list of Standard Ordinance cities. Twenty cities will be dropped from the list in 1940 for that reason. The remaining cities were urged not to "rest on their laurels", but to make consistent effort to attain the accredited list of 90% cities, if they had not already done so. Those already on the list, were urged to maintain the excellence of their inspection service so that they could remain on 90% rating from year to year.

The surveys on which these ratings are based are made strictly in accordance with the provisions of the U. S. Public Health Service Milk Ordinance and Code. Records of the various cities previously established, stand or fall according to the way ordinance enforcement is carried out. Partisanship or politics do not enter the picture. If a municipality makes the required percentage to be included in the accredited list, one may be certain that they merit it. Due to apathy in some instances, and in others to a change in personnel or increased duties of present employees, every 90% city in the State, with one exception, failed to maintain the required 90% rating and was removed from the accredited list. Since then, these cities, with two exceptions, have regained their status and additional cities have attained it.

This situation, on the surface, would seem to indicate that milk sanitation is retrogressing in Florida under the State Board of Health program. However, that is not the case. It is obvious that this holds for those cities which have once attained the accredited list and have been removed because of a let-up of enforcement, but by far the majority of the Standard Ordinance cities of the State are those who have never achieved this distinction yet have steadily improved the sanitation status of their dairies to a point just below a 90% rating. Some of these cities have attained 90% ratings on their raw milk supply and have been withheld from the list because the pasteurized milk supply rating fell short of 90%. This rating must be made on both the raw milk and pasteurized milk before the city may be included in the accredited list.

Very gratifying results have been obtained in the pasteurized milk promotion program. Pasteurized milk consumption has increased materially and consequently the percentage of pasteurized milk has grown somewhat in the majority of the cities. In one city that had no available supply of pasteurized milk at the beginning of the year, 65% of the entire supply is now properly pasteurized.

Through the efforts of the county health departments and the newly-organized State-wide Public Health Committee, public health education has been disseminated widely over the State. The gospel of safe milk (i.e., pasteurized milk) has been preached continuously by these health-minded and public spirited citizens. Not only do they stress pasteurized milk, but they urge consumers to determine whether or not it has been pasteurized and protected under Standard Ordinance requirements.

Many surveys by the United Stated Public Health Service and by the Engineering Bureau of the State Board of Health have proved that a great percentage of the so-called "pasteurized" milk was inadequately processed and improperly protected from contamination after pasteurization. In the great majority of instances, improper and/or inadequate equipment was being used to process the milk. The situation is an indictment against the milk control agencies within the State and causes the public to labor under a false sense of security. The consuming public has every reason to believe when they receive a bottle of milk labeled "Grade 'A' Pasteurized" that it has been properly pasteurized and protected against subsequent contamination.

Twenty-one Florida cities, operating under the Standard Milk Ordinance have made definite improvement in the processing of their pasteurized milk supply and are now complying in a fairly satisfactory manner with the U. S. Public Health Service Milk Ordinance requirements. Fourteen of them, however, fell short by two or three percent of the coveted 90% rating. A rating this high is hard to make and, once made, is hard to maintain because of the consistently strict rating procedure followed by State and Federal authorities.

Parent-Teacher Associations and civic organizations throughout the State are evincing interest in the milk sanitation program. Especially are they interested in the school milk supply. Through them it was possible to develop good supplies for individual schools even where the Standard Ordinance was not in force. They are beginning to know the difference between just "pasteurized milk" as it is commonly processed throughout the State, and properly pasteurized milk such as is afforded by the nationally-accepted standards of the USPHS Milk Ordinance under the direction of qualified health officers and trained sanitarians.

The health of the cattle producing the milk and of the employees handling the milk is receiving more attention than this particular phase of milk sanitation has ever received before. A close check on these items is kept by the health officers in all the full-time county health departments in the State and in those cities operating under the Standard Ordinance. All milking herds on these sheds have been tested for Bangs disease, and the tuberculosis test has been given practically all of them during the last twelve months. Tests for mastitis are not being made generally, but a concerted effort to emprove the situation is already under way. Every new ordinance drawn requires a routine test for mastitis as well as Bangs disease and T.B.

Great improvement has been made in farm sterilization procedure during the year. Individual tests on each sterilizing cabinet are being carried out in Standard Ordinance cities and if conditions warrant, individual instruction of the dairymen by the supervisor is given showing ways to remedy any defect. Plans for cabinets of proper design as well as plans for dairy barns and milk houses have been worked out by the Bureau of Engineering which meet all Public Health Service Milk Ordinance requirements and are now available to any interested dairy farmer.

The progress of the State Board of Health milk program, though somewhat gratifying, falls far short of being satisfactory. Little or no progress has been made in those counties having no adequate health set-up nor is it believed any can be made under such unfavorable conditions. In previous years, the only cities making satisfactory showing were located in counties having full-time county health departments, and the same holds true today. An ordinance is ineffective unless adequate machinery is available to put it into operation and keep it in force. Intermittent inspection service by part time health officers and sometimes by policemen and foremen delegated to perform this technical service is a "parody" and a waste of the tax payer's money. More than this, it serves to prevent the establishment of a properly constituted health department and subsequently the adoption of adequate rules and regulations to govern conditions affecting the health of the people. A service of this sort is a balm that lulls the community at large into a state of apathy and is infinitely worse than no service at all. The people under such circumstances think they have health protection and make no effort to get real security. Not until the populace has been properly informed can we expect a change. When the public realizes the need of adequate health service and wants it, then it will come.

Another mistaken idea in the minds of the public is that low bacteria count milk is good milk. Nothing could be more erroneous. This idea dates back to a day when there were few State and local health departments and practically no inspection personnel. The only service that could be rendered under such conditions, and this by only a few select communities, was "platform" inspection and milk sampling. The modern conception of adequate inspection service is entirely different. To be sure, we recognize the importance of making bacteriological examinations of milk, but we also recognize the limitations of its importance. But this is only a small part of the entire picture. When we realize that is is not the amount of bacteria in the milk that is significant, but the type, we will have a clearer picture of the situation. Milk having a bacterial count of 10,000 is generally considered throughout the State to be good milk. However, one can readily see the danger if these were all typhoid fever organisms.

The way to keep typhoid fever and other harmful bacteria from a milk supply is to check every angle of milk production consistently and persistently with special attention to excreta disposal, water supplies, fly control, and the health of personnel, including adequate tests for "carriers" of pathogens such as those causing typhoid fever, diphtheria, and dysentery. Such a service is very specialized and is ineffective when attempted by part time and perhaps untrained health personnel. A full-time county health department, manned by adequately trained and experienced personnel is the only way to get a well-rounded service and do away with the idea that low count milk is good milk.

Industrial Wastes

Industrial waste problems in the State are of interest in connection with paper mills, citrus canning and stock feed plants.

Unfortunately, citrus canning plants and stock feed plants utilizing citrus peel and rag are located largely in the lake area. The wastes from these plants are high in biochemical oxygen demand and when discharged into lakes cause serious nuisances. In 1938, the Canner's Association, the United States Department of Agriculture, and the Florida State Board of Health entered into an agreement to study treatment of canning wastes. This Bureau designed an experimental plant which was constructed at Winter Haven with funds furnished by the Canner's Association. The Citrus Experiment Station maintained there by the Department of Agriculture under Harry vonLoesecke supervised experimental operations and did the necessary laboratory work. Experiments began in the 1938-39 season and were continued for the 1939-40 season. A report is to be made early in 1940.

This study does not include the waste from citrus stock feed plants which is a particularly obnoxious waste containing about 6% solid matter. It cannot be handled by municipal sewerage systems, nor is it possible to discharge this material into lakes without nuisance. As a last resort, permits were given for experimental drainage wells to care for these wastes. Such experimental wells were tried at Haines City, Lake Alfred, and Lake Wales. The Haines City well has not been satisfactory; at Lake Alfred, no trouble has been encountered; and the well at Lake Wales has not been continued sufficiently long for adequate observation.

Malaria Mosquito Control

Malaria control work continued throughout 1939 with considerable difficulty due to the lack of medical personnel to make necessary epidemiological surveys upon which to base a mosquito control program.

The malaria control demonstration program in Escambia County under Dr. J. E. Elmendorf was continued during the year, and results will be found in a special report by Dr. Elmendorf. Arrangements were made whereby, with expenses paid, county health officers and sanitary officers were able to spend several days studying this work. A course was also given by Dr. Mark Boyd for Assistant Engineers Newman and Broughman and a few sanitary officers, on the differentiation of Anopheles species in larval stage, etc.

Four counties were selected for promotion of malaria control programs by county units. These were Gadsden, Jackson, Leon, and Taylor. Only in Gadsden, however, was any definite program commenced. The City of Quincy appropriated funds for the purchase of material for lined ditches in the town and a WPA project was secured for the purpose. A small amount of Dr. Elmendorf's time was available in counties west of

Tallahassee and he co-operated with the Health Unit Director of Gadsden County in an epidemiological survey. Cases were definitely located showing the areas of malaria prevalence. Entomological surveys were made and a drainage program designed.

Work has been carried on in co-operation with the County Health Units in Lake and Hillsborough Counties. Also some work was done on the old drainage in Perry, Taylor County, installed in 1921 - 1925 under State Board of Health supervision. In all of these counties, entomological studies were made.

It is very difficult to make progress on malaria control. Any undertaking of this kind involves the devotion of a large amount of time by health officers and sanitary officers, as well as by State Board of Health personnel. Money is necessary for materials even if WPA labor is utilized.

Drainage work accomplished during the year may be tabulated as follows:

HAND WORK DRAINAGE

Main Channels:	1, 318, 823 lin. ft.	79, 425 cu. yd.
Laterals:	484, 193 lin. ft.	19, 458 cu. yd.
Man Hours	193, 071	
Water Surface Drained:	176,336,858 sq. ft.	

RECONDITIONING (existing systems)

Main Channels:	258, 530 lin. ft.
Water Surface Drained:	122, 870, 720 sq. ft.
Laterals:	66, 367 lin.ft.
Water Surface Drained:	131, 660, 160 sq. ft.
Man Hours:	123, 852

FILLS

Fill:	32, 375 cu. yds.	Water Surface Filled:	537, 975 sq.ft.
Man Hours:	76, 231	Team or Truck Hours:	4,525

AVERAGE NUMBER MEN WORKING DURING EACH WORK PERIOD DURING YEAR: 259

Pest Mosquito Control

Co-operation was given mosquito control districts in the State, and a salt marsh control project sponsored in Hillsborough County. Surveys were made of Martin and Palm Beach Counties.

Shellfish and Other Seafood

Oyster shucking houses and shell stock shipments were kept in the same highly satisfactory condition as was reported last year. Very favorable comment was made concerning these plants by the U. S. Public Health Service officials who base, on the State work, their recommendations as to oysters shipped in interstate commerce.

The most difficult problem in regard to shellfish sanitation is preventing the taking of shellfish from sewage polluted waters. By far the greatest number of epidemics traceable to shellfish are due to taking the shellfish from such waters. The Bureau of Engineering publishes maps showing these polluted areas, and the maps are kept up-to-date by repeated surveys. However, personnel is lacking for the patrol of such areas. The State Conservation Department has a force of 20 or more men doing such patrol work for other purposes, and for years have agreed, in principle, to include this work in their activities. Their co-operation, however, has not been entirely satisfactory.

Permitted seafood establishments operating during the year were as follows:

Total Shellfish Houses Operating:	61
Shellstock only:	17
Clams only:	2
Scallops only:	1
Crabmeat and Lobster Meat Houses:	27

The Shellfish Inspector makes continuous visits to all of these. An inspection report is furnished the U. S. Public Health Service monthly on oyster and clam establishments. In addition, considerable time is spent with local authorities in preventing "bootleg" oysters from being marketed--i.e., oysters from unapproved dealers who, in a large number of cases take oysters from sewage polluted areas and sell them to the public.

Rodent Control

Many calls for assistance have been received from local health officers in connection with rodent control work where typhus fever outbreaks occur. Some assistance has been given, but no personnel is available for effective work in this field.

Home Sanitation

Service relating to sanitation in the individual home is not practicable except through local health units, and assistance has been given

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Service relating to sanitation in the individual home is not practicable except through local health units, and assistance has been given them in this work. However, by the use of WPA labor, privy projects have been promoted and secured in all counties having health units and in some other counties where local interest supports them. The U. S. Public Health Service has furnished three supervisors in connection with these projects until July 1, when their funds available for the purpose were reduced and for the remaining months of the year two men were made available by supplementing the Public Health Service allotment with Bureau funds.

6231 privies were constructed under these projects during 1939.

School Sanitation

During the conference on public health education held at Gainesville in the summer of 1939, general policies in regard to proper sanitation of schools were established and basis made available for a code jointly with the State Board of Health and the State Department of Education. Many school buildings in the State are in a very insanitary condition. This work needs to be pushed actively by County Units. The Bureau of Engineering has been furnishing plans for larger schools covering sewage disposal, and for small schools, standard plans are available. There is a definite need for advisory service by the Bureau on larger school buildings.

Legislation

Three bills were prepared by the Bureau and passed by the Legislature during the year. Each was an amendment to old statutes. The most important empowers the State Board of Health to set up a State Sanitary Code covering sanitary and quarantine regulations on activities specifically stated so that no conflicts should occur with other State departments making regulations. In addition, it is made possible for local health units to use and enforce the Code.

A second bill amended and improved the statute in regard to tourist camps so that it covers trailer camps as well.

The third bill remedied a defect in the old law giving the State Board of Health authority on public water supplies and sewerage systems and the pollution of waters in the State.

SANITATION

Fred A. Safay, Director

The Sanitation Section of the State Board of Health, as the name implies, was created for the purpose of rendering assistance to citizens on matters pertaining to every phase of sanitation as it effects the public health. The Section thus formed began operation on October first, 1939. This report showing activities and accomplishments of the Section for 1939, therefore, covers the three month period only - October, November and December.

PERSONNEL

The personnel of the Section is composed of a Director, an Assistant Director, four Field Representatives, two District Supervisors on Community Sanitation Project, a Secretary and one Clerk-Stenographer.

FUNCTION

The duties of the Section as defined are:

a. To encourage and assist in promoting, through educational effort, the formation of County Health Units in the unorganized counties in the State.

b. To create sentiment for privy sanitation projects both in the organized and unorganized counties of the state.

c. To give assistance to the citizenry in the unorganized counties of the state on matters pertaining to sanitation, as provided by state law.

d. To supervise environmental sanitation as it pertains to inspection and issuance of permits for the operation of tourist camps, bottled water plants, swimming pools, and canneries. In organized counties this work is done in conjunction with the County Sanitarian. To conduct inspections of all child caring homes and institutions and furnish reports to the State Welfare Board for use in issuance of licenses for the operation of these homes.

e. Sanitary control is likewise maintained over public fairs, schools, recreation and summer school camps, scout camps, private home water supplies and service provided on storm and disaster relief. The matter of rabid dog investigations is referred to this department.

STATE-WIDE W.P.A. COMMUNITY SANITATION PROJECT

To this Section has been designated the responsibility for the State Board of Health's part in the operation of the State-Wide W.P.A. Community Sanitation Project, in cooperation with the United States Public Health Service. Messrs. J.B.Miller and W.W.McPhaul of this office have been appointed District Supervisors on this project, and Mr. Miller, working out of Section headquarters in Jacksonville, has been placed in direct charge of the work to coordinate the operation throughout the State. Mr. McPhaul covers work on this project in the southern part of the State, working out of the Tampa office.

In connection with the operation of this Project, a monthly News-Letter is prepared by the Section covering work of all projects in the several counties. The information given in these News-Letters covers the following items in detail for each county project:

Number of counties in which projects are operating.
Number of men on the projects.
Cost of material per unit.
Number of privies installed for the month.
Number of privies installed to date - by the WPA, CWA and FERA Projects.

The letter further gives information pertaining to staining, painting or varnishing done in connection with construction of these privy units.

The close of December 1939 marked the end of the first quarter during which the Sanitation Project had been operating under the supervision of the Sanitation Section. For this last quarter (October, November and December) of the year, the monthly average number of privy installations was 535. This number represented an increase of more than four percent over the first nine months of the year.

The News-Letter for December was of special interest for in addition to supplying information covering work of the privy projects, a map of the State showing incidence of hookworm disease in each county was shown on the cover page.

TOURIST CAMPS

During the three month period 760 tourist and trailer camps were inspected by field personnel of the Section and permits were issued for operation of 658 camps having met the State Board of Health requirements. This tourist camp work in the organized counties was done in conjunction

with the sanitarians of the County Health Units and in the remaining counties by the four field representatives of the Section.

An official list showing all tourist and trailer camps operating in the State under permits issued by the State Board of Health, was prepared during November and covered a total of 593 camps. Copies of this list were sent to all Camp Operators, Chambers of Commerce in the larger cities in the State, City and County Health Departments, as well as interested organizations and officials outside the state.

Distribution of information concerning our permitted and properly equipped camps tends to assure patronage of these satisfactorily maintained units by the travelling public. Tourist camp work is done under provision of the State Law and State Board of Health ruling.

CANNING PLANTS

Sanitary operation of the food canning plants in the state is controlled by sanitary supervision as provided by State Board of Health regulation on this matter. This regulation further provides that permits for the operation of these plants must be secured before operation starts. Annual canning plant permits expire on October 1, and no permit is granted for new or previously operated plants until a detailed sanitary inspection has been made. In organized counties, the county sanitarians are responsible for the initial inspection and later for the sanitary control of the plant.

To the end of the year 1939, 96 had been inspected and permits for their operation issued by the Section.

BOTTLED WATER

Control of the handling and sale of bottled water, which in this State is quite extensive, because of the objectionable mineral content of many of the deep well supplies is another duty of this Section. The matter is covered by regulation of the Board and this department is charged with its enforcement. Annual permits for these bottled water establishments expire on December 31, and before renewal, inspection of the plant is necessary. Provision is also made in the State Board of Health ruling that samples of the bottled water as prepared for sale on the market must be submitted to the laboratory for bacteriological examination at regular intervals. There were in the state at the close of 1939, 56 bottled water plants offering their product for sale on the market in accord with State regulation.

Annual permits for the operation of, (1) tourist camps, (2) food canning plants, (3) bottled water plants and (4) swimming pools are all prepared by the Section and issued in the name of the State Health Officer, countersigned by the field representative of the Section and by the County Sanitarian for the County Health Unit. In counties not having organized health units - all work of this nature is carried on by the Section personnel.

STATE MILK CONTROL COMMISSION

The Director of the Section, as representative of the State Board of Health is a member of the State Milk Control Commission and in that capacity has a voice in the general operation of the Commission. At the December meeting, following an effort continued over a period of three months, the Section Director was successful in having passed by the Commission a ruling to prohibit the use of the gallon jug or container for dispensing milk. This special type of container is considered a definite health hazard.

BOARDING OR CHILD CARING HOMES AND INSTITUTIONS

Child Caring or Boarding Homes and Institutions operated by private individuals or societies for profit, according to State Law, must be licensed by the State Welfare Board. Before these licenses are granted it is necessary for the Welfare Board to secure a report from the State Board of Health covering an inspection as regards the sanitary condition of the homes. These inspections are made by field representatives of this Section and reports are submitted to the Welfare Board in detail on regular forms showing condition of the several features listed:

Premises
Home
Sleeping Quarters
Dining Room
Milk and Food Supplies
Water Supply
Kitchen
Recreation features
Sewage Disposal
Safety devices.

To the end of the year 113 inspections had been made of boarding homes for children by Section personnel and reports covering each submitted to the Director of Child Welfare, Division of the State Welfare Board. In counties having local health service the county sanitarian assisted in these inspections - in the remaining counties - the four field representatives were responsible for this work.

Before beginning work in Duval County a conference was arranged to include members of the Duval County Health Unit and City Health Department. In the Jacksonville area arrangements were made to have our inspections followed up by visits from a nurse.

The program of the Sanitation Section, initiated during the three month period, as covered by this report, has as its main objectives:

1. Efforts to promote formation of full time County Health Units during the course of sanitation work throughout the State.
2. Successful operation of the WPA Community Sanitation Projects throughout the State, cooperating with the U. S. Public Health Service. Satisfactory continuation of the project already in operation in the several counties and encouragement and assistance to other counties in the creation of such projects.

3. Assistance to all County Sanitarians on matters pertaining to general sanitation as covered by State Statutes and State Board of Health rulings. Instruction concerning enforcement of these regulations and procedure necessary, when court cases result from non-compliance, are given these sanitary officers.
4. Proper sanitary supervision of all establishments covered by State Statutes, viz., tourist camps, canneries, swimming pools, bottled water plants, etc. Issuance of annual permits for the operation of these establishments upon compliance with State ruling.

   In counties having full time health service - this matter is handled in conjunction with the local health department.
5. Attention given general conditions in the state as they effect the public health from a sanitary standpoint.

APPENDIX

Summary report of the
central and branch laboratories
for the year 1939

	POSITIVE	NEGATIVE	PARTIAL	UNSATISFACTORY	TOTAL	GRAND TOTAL
INTESTINAL PARASITES						
Hookworm	23,482	53,134		1,041	77,657	
Ascaris lumbricoides	1,362				1,362	
Oxyuris vermicularis	282				282	
Tapeworm	125				125	
Trichocephalus dispar	603				603	80,029
THROAT						
Diphtheria	385	16,472		137	16,994	
Virulence test	4	3			7	
Vincent's angina	1,115	2.965		14	4,094	
Streptococcus	345	415			760	21,855
MALARIA						
Tertian	186	18,678		41	18,905	
Estivo-Autumnal	186				186	
Untyped	7				7	19,098
AGGLUTINATION TESTS						
Typhoid	197	12,904	87	126	13,314	
Para Alpha	17	2,925	6	13	2,961	
Para Beta	27	2,902	10	15	2,954	
Brucella abortus	139	4,053	28	61	4,281	
Spotted fever		1			1	
Weil Felix	193	4,666	82	10	4,951	
Tularense	20	908	9	8	945	29,407
CULTURES						
Blood		51			51	
Stool and Urine	10	1,094	2	10	1,116	1,167
TUBERCULOSIS						
Microscopic	1,306	8,394		57	9,757	9,757
Inoculation					14	14
OPHTHALMIA						
Gon.	21	530		10	561	561
GONORRHEA	4,117	27,080		200	31,397	31,397
SYPHILIS						
Kahn	46,909	223,825	5,123	12,049	287,906	287,906
Evaluation test	154	206	11	4	375	375
Darkfield	10	51			61	61
RABIES						
Dogs	166	219		22	407	
Cats	10	59		4	73	
Other animals	9	33			42	522
LEPROSY	2	19			21	21

WATER - Chemical Samples Rec.	113	TESTS MADE	543	543
WATER - Bact. Samples Rec.	8,972	" "	10,862	10,862
MILK Samples Rec.	4,543	" "	6,806	6,806
ICE CREAM " "	465	" "	486	486
MISCELLANEOUS " " Smears & Cultures	648	" "	648	648
Sewage " "	40		486	486
		TOTAL		502,001

Annual report of the
Jacksonville laboratory
for the year 1939

	POSITIVE	NEGATIVE	PARTIAL	UNSATISFACTORY	TOTAL	GRAND TOTAL
INTESTINAL PARASITES						
Hookworm	15,203	36,285		853	52,341	
Ascaris lumbricoides	1,005				1,005	
Oxyuris vermicularis	165				165	
Tapeworm	81				81	
Trichocephalus dispar	391				391	53,983
THROAT						
Diphtheria	175	7,507		3	7,685	
Wirulence test	4	3			7	
Vincent's angina	182	812		1	995	
Streptococcus	176	229			405	9,092
MALARIA						
Tertian	108	13,317		11	13,436	
Estivo-Autumnal	85				85	
Untyped						13,521
AGGLUTINATION TESTS						
Typhoid	90	8,441	24	31	8,586	
Para Alpha	2	900		8	910	
Para Beta	16	885		8	909	
Brucella abortus	71	2,495	25	40	2,631	
Spotted fever		1			1	
Weil Felix	136	2,678	49	6	2,869	
Tularense	9	797	7	5	818	16,724
CULTURES						
Blood		40			40	
Stool and Urine	4	477	2	7	490	530
TUBERCULOSIS						
Microscopic	491	4,813		42	5,346	5,346
Inoculation					14	14
OPHTHALMIA						
Gon.	9	252			261	261
SYPHILIS						
Kahn	34,052	133,102	2,041	9,290	178,485	178,485
Evaluation test	154	206	11	4	375	375
Darkfield	4	34			38	38
GONORRHEA	2,288	15,613		112	18,013	18,013
RABIES						
Dogs	92	153		9	254	
Cats	2	33		2	37	
Other animals	5	16			21	312

WATER - Chemical Samples Rec.	113	TESTS MADE	543	543
WATER - Bact. Samples Rec.	6,260	" "	6,260	6,260
MILK " "	831	" "	1,651	1,651
ICE CREAM " "	11	" "	11	11
MISCELLANEOUS " " Sewage, Chemical tests		" "	486	486
Smears and Cultures	396		369	369
		TOTAL		306,014

Report of the Jacksonville laboratory
by months for the year 1939

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
ANIMAL PARASITES														
HOOKWORM														
Pos.	938	1023	1294	1370	926	639	580	1053	1337	2216	2170	1657	15203	
Neg.	2510	2454	3368	2807	2725	2110	1623	2813	3664	3841	4611	3759	36285	
Unsat.	28	51	38	68	41	16	7	32	41	106	279	146	853	
ASCARIS	225	106	68	65	43	53	47	39	39	50	170	100	1005	
OXYURIS	8	10	10	6	4	9	3	15	7	41	25	27	165	
TAPEWORM	2	6	13	16	3	6	6	10	2	6	5	6	81	
TRICHIURIS	19	19	26	26	9	50	28	16	19	44	72	63	391	53983
THROAT CULTURES														
DIPHTHERIA														
Pos.	12	13	8	8	6	8	8	12	21	23	35	21	175	
Neg.	727	593	719	440	390	489	417	335	710	848	1075	764	7507	
Unsat.											2	1	3	7685
VIRULENCE TESTS														
Pos.	2									1	1		4	
Neg.							2	1					3	7
VINCENT'S ANGINA														
Pos.	17	22	25	14	11	10	9	11	9	11	23	20	182	
Neg.	67	68	80	56	88	60	45	61	78	83	57	69	812	
Unsat.					1								1	995
STREPTOCOCCUS														
Pos.	15	13	14	11	19	8	5	14	20	26	19	12	176	
Neg.	29	19	14	20	5	14	9	25	17	23	22	32	229	405
MALARIA														
Pos.	3	4	6	6	16	10	18	25	31	44	22	8	193	
Neg.	880	893	1030	894	1343	1509	1378	1456	1197	1142	1021	574	13317	
Unsat.					1	2	3	2			2	1	11	13521
AGGLUTINATION TESTS														
TYPHOID														
Pos.	2	7	7	5	12	7	7	21	14		5	3	90	
Neg.	674	645	714	639	1003	816	807	816	717	717	501	342	8441	
Partial	2	6	4	2	7	1				2			24	
Unsat.	1		2	7	5		1	5	2	4		4	31	8586
PARA TYPHOID A														
Pos.							1		1				2	
Neg.	48	60	35	62	107	75	84	92	115	103	62	57	900	
Unsat.							2	1	3			2	8	910
PARA TYPHOID B														
Pos.		2		1			2	4	3		1	3	16	
Neg.	48	58	34	61	107	75	83	88	113	103	61	54	885	
Unsat.							2	1	3			2	8	909
WEIL FELIX														
Pos.	4	8	6	6	12	10	14	27	9	14	8	18	136	
Neg.	149	180	184	175	285	236	267	293	293	301	169	146	2678	
Partial	1	3	1	4	6	3	3	5	6	8	5	4	49	
Unsat.	1			1				2		1		1	6	2869
BRUCELLA ABORTUS														
Pos.		1	6	6	10	8	3	3	10	9	3	12	71	
Neg.	112	141	146	177	275	225	262	285	254	279	186	153	2495	
Partial		2	2	2				1	5	12	1		25	
Unsat.		1		2	4	10	6	7	5	3	1	1	40	2631
TULAREMIA														
Pos.	1		1			1		1		1		4	9	
Neg.	35	45	28	71	94	61	75	84	80	102	68	54	797	
Partial	1	1	2					3					7	
Unsat.			1	1		1	2						5	818
SPOTTED FEVER														
Neg.									1				1	1

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
TYPHOID CULTURES														
BLOOD Neg.	1	5	7	2	5	6	2	3	1	3	2	3	40	40
STOOL & URINE														
Pos.			3	1									4	
Neg.	35	33	34	33	47	47	27	14	81	56	38	32	477	
Partial			2										2	
Unsat.			5							2			7	490
TUBERCULOSIS														
MICROSCOPIC														
Pos.	42	45	42	44	65	37	30	33	37	39	51	26	491	
Neg.	503	410	443	429	462	431	351	446	332	424	314	268	4813	
Unsat.	2	2	2			2	8		6	7	11	2	42	5346
INOCULATION			1	1		1	1	1	5	2		2	14	14
OPHTHALMIA														
Pos.		1				2	1	2		2		1	9	
Neg.	10	75	14	11	10	15	12	24	35	20	14	12	252	261
GONORRHEA														
Pos.	230	217	220	175	193	131	174	201	172	195	190	190	2288	
Neg.	1098	1193	1446	1264	1429	1239	1266	1423	1206	1425	1509	1115	15613	
Unsat.	4	3	7	12	8	9	5	8	11	22	14	9	112	18013
SYPHILIS														
KAHN														
Pos.	2677	2727	3146	2724	2767	2648	2573	2994	3009	3211	2999	2577	34052	
Neg.	11337	9991	11083	9611	10294	10393	11061	11440	12957	12964	11412	10559	133102	
Doubtful	127	137	181	152	153	119	146	227	260	201	166	172	2041	
Unsat.	570	649	618	563	872	978	978	1067	1066	868	505	556	9290	178485
EVALUATION TEST														
Pos.	17	102	24	11									154	
Neg.	42	119	36	9									206	
Doubtful	1	4	4	2									11	
Unsat.		2	1	1									4	375
DARKFIELD														
Pos.										4			4	
Neg.				6	6	1		1	2	2	8	8	34	38
RABIES														
DOG Pos.	12	9	10	7	16	5	8	4	9	6	1	5	92	
Neg.	9	14	21	18	17	10	18	12	9	11	10	4	153	
Unsat.	3		1			1	1		3				9	
CAT Pos.			1							1			2	
Neg.	5	3	3	4	2	5	3	3	1	1	1	2	33	
Unsat.		1				1							2	
OTHER ANIMALS														
Pos.	1		2				1			1			5	
Neg.	3		3	2	2	2	1		1		2		16	312
WATER														
BACTERIOLOGICAL	399	445	541	526	565	566	503	585	546	614	512	458	6260	6260
CHEMICAL	59	63	43	12	36	28	14	29	26	34	61	138	543	543
SEWAGE														
CHEMICAL	147	192	125	22									486	486
MILK	147	116	140	134	145	112	154	104	155	124	166	154	1651	1651
ICE CREAM	1			10									11	11
MISCELLANEOUS	14	19	30	30	32	30	44	40	22	21	66	21	369	369
TOTAL	24057	23031	26125	22895	24684	23341	23191	26320	28778	30424	28734	24434	306014	306014

Annual report of the
Tampa laboratory
for the year 1939

	POSITIVE	NEGATIVE	PARTIAL	UNSATISFACTORY	TOTAL	GRAND TOTAL
INTESTINAL PARASITES						
Hookworm	3,870	9,831		12	13,713	
Ascaris lumbricoides	270				270	
Oxyuris vermicularis	79				79	
Tapeworm	17				17	
Trichocephalus dispar.	197				197	14,276
THROAT						
Diphtheria	115	2,022		9	2,146	
Vincent's angina	527	1,053		9	1,589	
Streptococcus	62	62			124	3,859
MALARIA						
Tertian	16	2,404		6	2,426	
Estivo-Autumnal	8				8	
Untyped	6				6	2,440
AGGLUTINATION TESTS						
Typhoid	64	2,930	42	31	3,067	
Para Alpha	6	807		1	814	
Para Beta	4	802		3	809	
Brucella abortus	17	793	2	2	814	
Weil Felix	28	762	19		809	
Tularense	2	53	2		57	6,370
CULTURES						
Blood		7			7	
Stool and Urine	4	164			168	175
TUBERCULOSIS						
Microscopic	595	2,287		10	2,892	2,892
OPHTHALMIA						
Gon.	8	224		10	242	242
GONORRHEA	1,119	4,660		20	5,799	5,799
SYPHILIS						
Kahn	6,277	43,107	1,133	1,388	51,905	51,905
Darkfield	3	8			11	11
RABIES						
Dogs	54	44		11	109	
Cats	5	17		2	24	
Other animals	4	11			15	148

WATER	Samples Rec.	584	TESTS MADE		584	584
MILK	" "	849	" "		1,692	1,692
ICE CREAM	" "	135	" "		135	135
MISCELLANEOUS	" " Smears and Cultures	172	" "		172	172
				TOTAL		90,700

Report of the Tampa laboratory
by months for the year 1939

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
ANIMAL PARASITES														
HOOKWORM														
Pos.	245	366	394	199	311	326	362	602	170	323	434	138	3870	
Neg.	813	1017	1031	675	848	737	673	900	440	804	1291	552	9831	
Unsat.	1	6	3	1								1	12	
ASCARIS	19	26	27	18	37	28	36	28	12	16	12	11	270	
OXYURIS	4	11	18	2	10	4		6	2	8	9	5	79	
TAPEWORM	5	4	1		2	1	1				2	1	17	
TRICHIURIS	21	3	23	19	41	16	14	8	6	17	22	7	197	14276
THROAT CULTURES														
DIPHTHERIA														
Pos.	9	9	9	11	8	21	8	8	8	15	3	6	115	
Neg.	211	244	202	139	137	107	122	153	138	169	108	242	2022	
Unsat.			1			2	1	2	1			2	9	2146
VINCENT'S ANGINA														
Pos.	58	49	50	41	46	60	53	30	37	36	35	32	527	
Neg.	85	98	98	72	111	79	81	83	72	89	85	100	1055	
Unsat.	1		1		2					1	3	1	9	1589
STREPTOCOCCUS														
Pos.	4	5	4	5	8	4	10	3	4	6	3	6	62	
Neg.	1	1	4	2	8	3	4	10	8	6	7	8	62	124
MALARIA														
Pos.	1	3		3	2	1	3	2	5	8	1	1	30	
Neg.	158	167	200	201	263	210	246	221	246	235	142	115	2404	
Unsat.			1			1	1	1	2				6	2440
AGGLUTINATION TESTS														
TYPHOID														
Pos.	1	2	3	11	16	2	1	14	7	2	2	3	64	
Neg.	162	166	216	230	278	229	275	254	353	364	212	191	2930	
Partial	4	7	2		6	2	1	3	7	9	1		42	
Unsat.	1		1	3	2	4	2	6	7	3		2	31	3067
PARA TYPHOID A														
Pos.		1	1		1	1				1		1	6	
Neg.	37	36	54	85	95	63	69	101	86	80	53	48	807	
Unsat.				1									1	814
PARA TYPHOID B														
Pos.		1	1							2			4	
Neg.	37	35	51	85	96	64	69	101	84	78	53	49	802	
Unsat.				1					2				3	809
WEIL FELIX														
Pos.	1	2	2		4	2	2	5	5	2	2	1	28	
Neg.	32	34	52	81	91	62	65	95	74	81	49	46	762	
Partial		2		3		2	1	2	8			1	19	809
BRUCELLA ABORTUS														
Pos.	3	4		4	3		2	1					17	
Neg.	34	36	51	78	92	66	67	99	84	83	55	48	793	
Partial	1	1											2	
Unsat.								1	1				2	814
TULAREMIA														
Pos.		1									1		2	
Neg.	5	7	6	9	5	2	4	3	4	6	1	1	53	
Partial	1	1											2	57

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
TYPHOID CULTURES														
BLOOD														
Neg.						1	1	1	3	1			7	7
STOOL & URINE														
Pos.									4				4	
Neg.	4	2	3	6	8	7	5	49	68	2	7	3	164	168
TUBERCULOSIS														
MICROSCOPIC														
Pos.	38	47	53	31	74	32	30	35	78	60	69	48	595	
Neg.	160	176	172	157	263	160	158	149	189	211	256	236	2287	
Unsat.						1	1	2	4		2		10	2892
OPHTHALMIA														
Pos.		1					1			1	2	3	8	
Neg.	25	15	15	17	22	21	20	15	18	21	17	18	224	
Unsat.			2	1	4	2						1	10	242
GONORRHEA														
Pos.	95	77	95	69	116	108	86	99	102	94	105	73	1119	
Neg.	379	344	421	380	457	421	383	394	369	425	352	335	4660	
Unsat.	1	2		1	6	4	1	3	1			1	20	5799
SYPHILIS														
KAHN														
Pos.	510	427	507	331	412	426	393	495	561	750	744	721	6277	
Neg.	4266	3047	3381	2717	3804	3066	2846	3261	3264	4978	4403	4074	43107	
Doubtful	95	88	115	81	145	101	92	113	85	80	77	61	1133	
Unsat.	136	93	86	88	110	123	117	120	100	164	134	117	1388	51905
DARKFIELD														
Pos.												3	3	
Neg.											3	5	8	11
RABIES														
DOG														
Pos.	8	5	5	6	8	5	1	3	4	5	1	3	54	
Neg.	2	8	4	3	3	3	6	5	4	1	4	1	44	
Unsat.	1	2		1	1	3	1		1		1		11	
CAT														
Pos.			1	1	1		1				1		5	
Neg.			1	2	2	3	4	2		1		2	17	
Unsat.												2	2	
OTHER ANIMALS														
Pos.				1	2			1					4	
Neg.			2	2	1	5						1	11	148
WATER	52	42	58	46	76	117	56	27	40	23	36	11	584	584
MILK	206	216	266	218	266	266	224			3	3	24	1692	1692
ICE CREAM	22	22	22	22	23	24							135	135
MISCELLANEOUS	12	10	12	22	22	14	28	9	10	12	10	11	172	172
T O T A L	7967	6969	7778	6182	8399	7012	6628	7525	6778	9276	8813	7373	90700	90700

Annual report of the
Pensacola laboratory
for the year 1939

	POSITIVE	NEGATIVE	PARTIAL	UNSATISFACTORY	TOTAL	GRAND TOTAL
INTESTINAL PARASITES						
Hookworm	2,289	3,498		78	5,865	
Ascaris lumbricoides	35				35	
Oxyuris vermicularis	20				20	
Tapeworm	18				18	
Trichocephalus dispar	5				5	5,943
THROAT						
Diphtheria	32	523		7	562	
Vincent's angina	185	413			598	
Streptococcus	104	19			123	1,283
MALARIA						
Tertian	31	932		3	966	
Estivo-Autumnal	54				54	
Untyped	1				1	1,021
AGGLUTINATION TESTS						
Typhoid	13	775	17		805	
Para Alpha		724	4		728	
Para Beta	2	719	7		728	
Brucella abortus	6	138			144	
Weil Felix	16	716	14		746	3,151
CULTURES						
Blood		4			4	
Stool and Urine	1	129		1	131	135
TUBERCULOSIS						
Microscopic	105	306		2	413	413
OPHTHALMIA						
Gon.	4	50			54	54
GONORRHEA	239	1,411		3	1,653	1,653
SYPHILIS						
Kahn		11			11	11
Darkfield		3			3	3
RABIES						
Dogs	19	17		2	38	
Cats	3	5			8	
Other animals		5			5	51

WATER	Samples Rec.	246	TESTS MADE	246	246
MILK	" "	366	" "	589	589
ICE CREAM	" "	25	" "	46	46
MISCELLANEOUS	" Smears and Cultures	67	" "	67	67
				T O T A L	14,666

Report of the Pensacola Laboratory
by months for the year 1939

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
ANIMAL PARASITES														
HOOKWORM														
Pos.	274	398	286	183	52	87	109	180	160	145	311	104	2289	
Neg.	212	365	388	312	92	208	226	502	310	275	436	172	3498	
Unsat.	7	14	13	5			1	9	10	3	1	15	78	
ASCARIS		2	6	3	4	1	5	4		5	4	1	35	
OXYURIS		2	3	1	1		3	1		3	4	2	20	
TAPEWORM	2	3	3			1		2	2	3		2	18	
TRICHIURIS						2	1	2					5	5943
THROAT CULTURES														
DIPHTHERIA														
Pos.	1					1	8	6	7	7		2	32	
Neg.	19	17	47	35	23	30	69	42	136	68	24	13	523	
Unsat.	1		1	2					2	1			7	562
VINCENT'S ANGINA														
Pos.	25	12	18	6	4	16	21	17	18	23	14	11	185	
Neg.	70	40	37	29	19	41	48	40	26	24	18	21	413	598
STREPTOCOCCUS														
Pos.	3	5	7	16	5	14	26		14	7	6	1	104	
Neg.	4							15					19	123
MALARIA														
Pos.		3	1		3	2	4	4	5	34	22	8	86	
Neg.	36	40	45	46	43	99	148	137	117	81	80	60	932	
Unsat.									2	1			3	1021
AGGLUTINATION TESTS														
TYPHOID														
Pos.	2	1	2					3	1	1	1	2	13	
Neg.	32	23	33	43	36	79	80	129	105	69	84	62	775	
Partial		4	1		1			2	1	3	3	2	17	805
PARA TYPHOID A														
Neg.	32	27	36	43	35	78	80	115	92	64	71	51	724	
Partial		1				1			1			1	4	728
PARA TYPHOID B														
Pos.	1	1											2	
Neg.	30	25	36	43	35	79	80	113	92	64	70	52	719	
Partial	1	2						2	1		1		7	728
WEIL FELIX														
Pos.				2	1	1	1	4	3		2	2	16	
Neg.	36	28	34	43	36	76	84	107	89	64	69	50	716	
Partial			2		1	1		7	2	1			14	746
BRUCELLA ABORTUS														
Pos.	1	1			2					2			6	
Neg.	7	4	8	5	6	20	9	23	16	9	17	14	138	144
TYPHOID CULTURES														
BLOOD														
Neg.	1					1			1			1	4	
STOOL & URINE														
Pos.							1						1	
Neg.	2	5	24	7	3	12		6	3	8	27	32	129	
Unsat.											1		1	135
TUBERCULOSIS														
MICROSCOPIC														
Pos.	18	8	7	7	3	11	7	13	9	9	6	7	105	
Neg.	21	27	36	27	6	19	25	37	33	25	21	29	306	
Unsat.		1							1				2	413
OPHTHALMIA														
Pos.				1	1		1		1				4	
Neg.	5	2	1	1	2	9	6	7		5	9	3	50	54
GONORRHEA														
Pos.	20	29	12	18	9	19	21	23	19	29	19	21	239	
Neg.	116	92	102	97	65	143	149	167	145	124	117	94	1411	
Unsat.					1				2				3	1653
SYPHILIS														
KAHN														
Neg.		4		3					2			2	11	11
DARKFIELD														
Neg.												3	3	3
RABIES														
DOG														
Pos.	3	6	5	2		2				1			19	
Neg.	1		3	3	2	2	1	2		3			17	
Unsat.				2									2	
CAT														
Pos.	2		1										3	
Neg.				1			2				1	1	5	
OTHER ANIMALS														
Neg.	1	1		2	1								5	51
WATER	43	42	14	6	11	32	34	23	21	11	3	6	246	246
MILK	38	86	57	3	122	58	63	53	12	37	27	33	589	589
ICE CREAM	7	11	2		18	2	2		4				46	46
MISCELLANEOUS	10	14	6	3		3	5	3	4	7	10	2	67	67
T O T A L	1084	1346	1277	1000	643	1150	1320	1800	1469	1216	1479	882	14666	14666

Annual report of the
Miami laboratory
for the year 1939

	POSITIVE	NEGATIVE	PARTIAL	UNSATISFACTORY	TOTAL	GRAND TOTAL
INTESTINAL PARASITES						
Hookworm	34	1,070		12	1,116	
Ascaris lumbricoides	8				8	
Oxyuris vermicularis	5				5	
Tapeworm	5				5	
Trichocephalus dispar	5				5	1,139
THROAT						
Diphtheria	61	6,246		118	6,425	
Vincent's angina	198	572		4	774	
Streptococcus	1	38			39	7,238
MALARIA						
Tertian		271		2	273	
Estivo-Autumnal	1				1	274
AGGLUTINATION TESTS						
Typhoid	22	429		61	512	
Para Alpha	7	314		4	325	
Para Beta	3	318		4	325	
Brucella abortus	40	498		19	557	
Weil Felix	6	292		4	302	
Tularense	9	58		3	70	2,091
CULTURES						
Stool and Urine	1	324		2	327	327
TUBERCULOSIS						
Microscopic	106	708		3	817	817
OPHTHALMIA						
Gon.		2			2	2
GONORRHEA	329	4,669		62	5,060	5,060
SYPHILIS						
Kahn	6,575	47,538	1,949	1,370	57,432	57,432
Darkfield	3	6			9	9
RABIES						
Dogs	1	5			6	
Cats		4			4	
Other animals		1			1	11
LEPROSY	2	19			21	21

WATER	Samples Rec.	1,869	TESTS MADE	3,740	3,740
MILK	" "	2,416	" "	2,556	2,556
ICE CREAM	" "	290	" "	290	290
MISCELLANEOUS	" "				
Smears and Cultures		15		15	15
			T O T A L		81,022

Report of the Miami laboratory
by months for the year 1939

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
ANIMAL PARASITES														
HOOKWORM														
Pos.	2			1	2	1	5	1	8	10	3	1	34	
Neg.	143	101	86	68	159	73	95	88	51	85	70	51	1070	
Unsat.	1		4	3	1		1	2					12	
ASCARIS	1					2	1		1		2	1	8	
OXYURIS					2	2				1			5	
TAPEWORM		1	3					1					5	
TRICHIURIS	1		1	1					1		1		5	1139
THROAT CULTURES														
DIPHTHERIA														
Pos.	3			1	1				16	27	4	7	61	
Neg.	1022	581	223	236	250	79	92	109	428	2450	354	422	6246	
Unsat.	16	9	22	12	9	4	1	2	3	5	16	19	118	6425
VINCENT'S ANGINA														
Pos.	34	15	9	7	14	8	11	19	16	26	21	18	198	
Neg.	106	74	48	42	40	28	35	47	32	36	40	44	572	
Unsat.								1	1	1	1		4	774
STREPTOCOCCUS														
Pos.						1							1	
Neg.	1	1	3	3	2	5		18	2		3		38	39
MALARIA														
Pos.											1		1	
Neg.	21	23	25	15	20	24	32	32	19	22	23	15	271	
Unsat.				1			1						2	274
AGGLUTINATION TESTS														
TYPHOID														
Pos.								5	1	9	6	1	22	
Neg.	37	45	49	47	25	25	42	40	40	29	29	21	429	
Unsat.	1	3	1		2	21	11	8	5	6	2	1	61	512
PARA TYPHOID A														
Pos.									2	3	1	1	7	
Neg.	37	45	49	47	25	24	18	11	30	11	14	3	314	
Unsat.		1				3							4	325
PARA TYPHOID B														
Pos.									2			1	3	
Neg.	37	45	49	47	25	24	18	11	30	14	15	3	318	
Unsat.		1				3							4	325
WEIL FELIX														
Pos.								1	2		1	2	6	
Neg.	37	45	49	45	25	8	11	7	32	16	14	3	292	
Unsat.		1				3							4	302
BRUCELLA ABORTUS														
Pos.	3	5	6	1	3	1	3	1	3	2	8	4	40	
Neg.	16	20	25	38	7	29	89	66	59	98	38	13	498	
Unsat.		1	6	5	2	3	2						19	557
TULAREMIA														
Pos.											9		9	
Neg.						14	12	3	17	4	7	1	58	
Unsat.			1	2									3	70

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
TYPHOID CULTURES														
STOOL & URINE														
Pos.											1		1	
Neg.	29	20	17	48	71	21	11	16	11	25	27	28	324	
Unsat.					1						1		2	327
TUBERCULOSIS														
MICROSCOPIC														
Pos.	12	4	8	3	4	5	5	7	21	23	6	8	106	
Neg.	59	52	57	80	57	50	62	70	57	50	41	73	708	
Unsat.			1		1			1					3	817
OPHTHALMIA														
Neg.			1							1			2	2
GONORRHEA														
Pos.	41	32	23	38	19	23	19	20	15	24	32	43	329	
Neg.	574	496	497	348	321	301	331	312	316	363	403	407	4669	
Unsat.	6	5		3	2		3	6	13	7	7	10	62	5060
SYPHILIS														
KAHN														
Pos.	461	341	390	308	304	356	335	527	774	821	992	966	6575	
Neg.	6242	3978	3362	2599	2826	2835	2696	2933	3182	4133	5444	7308	47538	
Doubtful	242	203	193	152	190	191	192	76	86	139	142	143	1949	
Unsat.	115	138	114	111	143	135	112	58	54	119	121	150	1370	57432
DARKFIELD														
Pos.										1		2	3	
Neg.											4	2	6	9
LEPROSY														
Pos.											2		2	
Neg.		1				8		1	4		3	2	19	21
RABIES														
DOG														
Pos.												1	1	
Neg.	1				1			1			1	1	5	
CAT														
Neg.						2		1				1	4	
OTHER ANIMALS														
Neg.				1									1	11
WATER	302	232	478	276	378	244	380	306	306	256	326	256	3740	3740
MILK	266	209	234	215	261	191	191	95	205	179	219	291	2556	2556
ICE CREAM	23	23	24	23	23	22	22	22	25	26	25	32	290	290
MISCELLANEOUS			1	1	3	2	1	4	1		1	1	15	15
T O T A L	9892	6751	6059	4828	5219	4771	4840	4929	5873	9022	8481	10357	81022	81022

Annual report of the
Tallahassee laboratory
for the year 1939

	POSITIVE	NEGATIVE	PARTIAL	UNSATISFACTORY	TOTAL	GRAND TOTAL
INTESTINAL PARASITES						
Hookworm	2,086	2,450		86	4,622	
Ascaris lumbricoides	44				44	
Oxyuris vermicularis	13				13	
Tapeworm	4				4	
Trichocephalus dispar	5				5	4,688
THROAT						
Diphtheria	2	174			176	
Vincent's angina	23	115			138	
Streptococcus	2	67			69	383
MALARIA						
Tertian	31	1,754		19	1,804	
Estivo-Autumnal	38				38	1,842
AGGLUTINATION TESTS						
Typhoid	8	329	4	3	344	
Para Alpha	2	180	2		184	
Para Beta	2	178	3		183	
Brucella abortus	5	129	1		135	
Weil Felix	7	218			225	1,071
TUBERCULOSIS						
Microscopic	9	280			289	289
OPHTHALMIA						
Gon.		2			2	2
GONORRHEA	142	727		3	872	872
SYPHILIS						
Kahn	5	67		1	73	73

WATER	Samples Rec.	13	TESTS MADE	32	32
MILK	" "	81	" "	318	318
ICE CREAM	" "	4	" "	4	4
MISCELLANEOUS	" "	Smears and Cultures	" "	25	25

T O T A L 9,599

LABORATORIES — TABLE XI

Report of the Tallahassee laboratory by months for the year 1939

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Grand Total
ANIMAL PARASITES															
HOOKWORM	Pos.	71	43	55	89	68	120	76	78	410	160	468	448	2086	
	Neg.	44	74	66	73	82	122	82	128	354	224	423	778	2450	
	Unsat.	2	5		2	2	12	1	2		1	31	28	86	
ASCARIS				1			3		2	3		16	19	44	
OXYURIS				1		1	2	1			1	3	4	13	
TAPEWORM												2	2	4	
TRICHIURIS									2				3	5	4688
THROAT CULTURES															
DIPHTHERIA	Pos.									1		1		2	
	Neg.	2	15	8	10	11	11	29	10	26	8	31	13	174	176
VINCENT'S ANGINA	Pos.		5	3	2	5	1				2	4	1	23	
	Neg.	9	7	16	10	15	7	15	10	7	7	5	7	115	138
STREPTOCOCCUS	Pos.											2		2	
	Neg.		5	4	5	10	9	9	4	11	4	2	4	67	69
MALARIA:	Pos.	1		1	2		1	8	9	11	22	10	4	69	
	Neg.	41	71	110	123	139	139	187	171	191	185	289	108	1754	
	Unsat.		1	1		4	2	2	5	1	2	1		19	1842
AGGLUTINATION TESTS															
TYPHOID:	Pos.				1	1	6							8	
	Neg.	2	9	20	24	28	31	46	41	52	36	22	18	329	
	Partial				1	1	2							4	
	Unsat.				1				1	1				3	344
PARA TYPHOID A	Pos.						2							2	
	Neg.	1	3	13	12	17	26	13	15	27	24	15	14	180	
	Partial				1		1							2	184
PARA TYPHOID B	Pos.						2							2	
	Neg.	1	3	12	12	16	26	13	15	27	24	15	14	178	
	Partial			1	1		1							3	183
WEIL FELIX	Pos.					2			1	4				7	
	Neg.	4	5	13	14	20	25	28	26	25	28	14	16	218	225
BRUCELLA ABORTUS	Pos.									1	4			5	
	Neg.			4	4	14	20	14	14	17	17	11	14	129	
	Partial				1									1	135
TUBERCULOSIS															
MICROSCOPIC	Pos.		1	3				1		2		2		9	
	Neg.	25	25	45	19	17	15	29	15	22	32	26	10	280	289
OPHTHALMIA:	Neg.							1			1			2	2
GONORRHEA:	Pos.	8	13	11	11	15	9	21	16	13	6	9	10	142	
	Neg.	30	75	84	43	73	53	59	80	60	82	37	51	727	
	Unsat.			1	1						1			3	872
SYPHILIS															
KAHN	Pos.					2		1			1	1		5	
	Neg.			1	14	1	9	4	14	7	10	4	3	67	73
	Unsat.								1						
WATER		5	15	8					4					32	32
MILK		1	42	43	48	67	28	58		1			30	318	318
ICE CREAM				4										4	4
MISCELLANEOUS		1	1				1	1	6	2	9	1	3	25	25
TOTAL		248	418	529	524	611	686	699	670	1276	891	1445	1602	9599	9599

MATERNAL AND CHILD HEALTH — TABLE XII

Maternal and Child Health activities in Florida reported to United States Children's Bureau for year 1939.

INFANT HYGIENE	
Individuals admitted to Well Baby Conferences	3,373
Individuals visits to Well Baby Conferences	4,314
Individuals admitted to Nursing Services	5,738
Home and Office Visits to nurses by infants	16,349
PRESCHOOL HYGIENE	
Individuals admitted to Preschool Conferences	5,457
Individuals visits to Preschool Conferences	6,040
Individuals admitted to Nursing Services	9,762
Field and Office Nursing Visits to Preschool children	17,562
Inspections by Dentists	1,795
Enrollment in Infant and Preschool classes	4,037
COMMUNICABLE DISEASE CONTROL	
IMMUNIZATIONS (Persons Immunized)	
Smallpox	23,187
Diphtheria, under 1 year	3,020
Diphtheria, 1 through 4 years	8,652
Diphtheria, 5 years and over (Diphtheria, total 27, 896)	16,224
Field visits by nurses for Control (childhood diseases)	5,098
SCHOOL HYGIENE	
Physical examinations by physicians	30,634
Examinations (physical) with parents present	3,132
Field Nursing Visits to School children	28,481
Office Nursing Visits by school children	16,186
Inspections by dentists	105,767
MATERNITY SERVICE	
Persons admitted to antepartum conferences	4,594
Persons admitted to antepartum nursing service	8,433
Visits by patients to antepartum Conferences	11,152
Field and Office Nursing Visits to antepartum cases	23,868
Cases given nursing services at delivery	110
Cases given postpartum physical examination	936
Cases admitted to postpartum nursing service	5,056
Visits by nurses to postpartum cases	10,884
Midwives under planned instruction	635
Visits for midwife supervision	2,382
Enrollment in maternity classes	1,248
Attendance at maternity classes	3,980
NURSING SERVICES	
Full-time qualified public health nurses furnished to health units	26
Full-time qualified public health nursing consultants	3
HOME DELIVERY NURSING SERVICE	
Nurses furnished for Home delivery Nursing Service	3
Patients receiving nursing service at home deliveries	101
DENTAL HYGIENE	
Contributions for organization of new dental clinics	3
Dental services furnished, fillings of all kind	11,847
Dental services furnished, extractions	1,901
Dental services furnished, prophylaxis	1,819
Dental services furnished, treatments of all kind	2,828
PROFESSIONAL SERVICES CONTRIBUTED	
Number of Physicians paid	56
Number of Dentists paid	20
TOTAL FEES PAID	$12,600.00

REPORTED CASES OF NOTIFIABLE DISEASES IN THE STATE OF FLORIDA

	STATE TOTAL 1939	Counties ALACHUA	BAKER	BAY	BRADFORD	BREVARD	BROWARD	CALHOUN	CHARLOTTE	CITRUS	CLAY	COLLIER	COLUMBIA	DADE	DESOTO
TYPHOID	128	0	0	0	0	0	2	0	0	4	0	0	2	18	0
PARATYPHOID	14	0	0	0	0	0	0	0	0	0	0	1	0	4	1
TYPHUS	152	1	0	0	0	0	0	0	0	0	1	0	0	18	0
MALARIA	435	0	0	12	0	0	10	0	0	1	2	0	8	18	0
SMALLPOX	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEASLES	2716	71	0	35	0	0	107	0	0	3	0	0	1	25	0
SCARLET FEVER	398	1	0	0	0	2	15	0	0	1	1	0	6	48	0
WHOOPING COUGH	1124	0	1	36	0	2	70	0	0	0	9	0	0	163	0
DIPHTHERIA	299	2	0	10	1	1	5	0	0	0	0	0	2	26	0
INFLUENZA	402	0	0	6	1	0	0	0	0	0	0	0	1	79	0
MUMPS	598	1	0	2	0	0	6	0	0	0	0	0	0	26	1
DYSENTERY	59	0	0	0	0	0	0	0	0	0	0	0	0	13	0
LEPROSY	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
POLIOMYELITIS	66	1	0	1	1	0	1	0	0	2	0	0	2	4	0
LETH. ENCEPHALITIS	10	1	0	0	0	1	2	0	0	0	0	0	0	3	0
MENINGITIS	20	0	0	0	0	0	0	0	0	0	0	0	0	4	0
CHICKENPOX	1139	2	0	9	0	1	34	0	0	0	2	0	4	59	0
GERMAN MEASLES	28	0	0	0	0	0	5	0	0	0	0	0	0	3	0
DENGUE	8	0	0	0	0	0	0	0	0	0	0	0	0	2	0
TETANUS	15	0	0	0	0	0	1	0	0	0	0	0	0	12	0
TUBERCULOSIS	916	5	1	10	0	2	29	0	1	0	0	0	69	285	0
SYPHILIS	21092	223	8	932	7	240	619	4	115	9	11	25	187	3104	62
CHANCROID	56	0	0	0	0	0	0	0	0	0	0	0	0	43	0
GONOCOCCUS	1650	10	1	22	2	2	4	2	0	1	4	0	10	347	0
OPTH. NEONATORUM	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0
CANCER	356	0	0	0	0	0	0	0	0	0	0	0	0	315	0
PELLAGRA	172	1	0	62	0	0	0	0	0	0	0	0	9	12	0
TULAREMIA	25	0	0	0	0	0	0	0	0	0	0	0	0	23	0
TRACHOMA	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PNEUMONIA	840	0	1	3	1	0	0	1	0	0	1	0	9	470	0
HOOKWORM	5766	2	1	549	2	1	13	0	0	0	0	0	6	7	0
TRICHINOSIS	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNDULANT	54	0	0	1	0	0	4	0	0	0	0	0	0	23	0

REPORTED CASES OF NOTIFIABLE DISEASES IN THE STATE OF FLORIDA

	DIXIE	DUVAL	ESCAMBIA	FLAGLER	FRANKLIN	GADSDEN	GILCHRIST	GLADES	GULF	HAMILTON	HARDEE	HENDRY	HERNANDO	HIGHLANDS	HILLSBORO	HOLMES
TYPHOID	0	13	11	0	0	6	0	0	0	0	0	0	0	5	17	0
PARATYPHOID	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TYPHUS	0	32	6	0	0	4	1	0	0	1	1	0	0	0	18	0
MALARIA	0	21	30	0	3	14	0	0	15	0	171	0	1	3	10	1
SMALLPOX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
MEASLES	0	74	177	0	14	17	0	0	25	0	18	0	3	7	1617	2
SCARLET FEVER	0	106	10	0	1	4	1	1	1	0	0	0	0	0	71	0
WHOOPING COUGH	0	279	153	0	6	8	0	0	12	0	3	0	0	3	118	4
DIPHTHERIA	0	72	8	0	0	6	3	0	3	0	1	0	0	6	54	1
INFLUENZA	0	9	42	0	2	134	0	0	2	0	14	2	0	1	37	3
MUMPS	0	381	103	0	0	4	0	0	1	0	0	0	0	5	17	0
DYSENTERY	0	4	0	0	1	36	0	0	1	0	0	0	0	0	6	0
LEPROSY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POLIOMYELITIS	0	12	1	0	0	1	0	0	0	0	0	0	0	1	6	1
LETH. ENCEPHALITIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
MENINGITIS	0	5	1	0	0	2	0	0	0	0	0	0	0	0	2	0
CHICKENPOX	0	268	262	0	6	51	0	0	5	0	0	0	3	3	229	6
GERMAN MEASLES	0	2	0	0	0	5	0	0	0	0	0	0	0	0	6	0
DENGUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TETANUS	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
TUBERCULOSIS	0	195	28	0	1	27	0	0	1	0	5	0	0	8	117	0
SYPHILIS	30	4066	1347	4	110	486	1	0	329	15	37	5	5	52	1163	8
CHANCROID	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0
GONOCOCCUS	1	416	224	0	1	10	0	0	19	1	3	1	0	3	264	2
OPTH. NEONATORUM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CANCER	0	4	1	0	1	2	0	0	0	0	0	0	0	0	4	0
PELLAGRA	0	6	30	0	1	7	0	0	5	0	3	0	0	0	1	1
TULAREMIA	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRACHOMA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PNEUMONIA	0	121	9	0	2	48	0	0	2	0	1	0	0	0	100	2
HOOKWORM	0	1296	598	0	133	261	0	0	120	0	95	2	0	67	534	0
TRICHINOSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNDULANT	0	6	4	0	0	1	0	0	0	0	2	0	0	0	4	0

REPORTED CASES OF NOTIFIABLE DISEASES IN THE STATE OF FLORIDA

	INDIAN RIVER	JACKSON	JEFFERSON	LAFAYETTE	LAKE	LEE	LEON	LEVY	LIBERTY	MADISON	MANATEE	MARION	MARTIN	MONROE	NASSAU	OKALOOSA
TYPHOID	0	0	0	0	2	0	0	0	0	1	0	4	1	0	4	0
PARATYPHOID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TYPHUS	0	3	0	0	2	2	1	0	0	2	2	3	0	0	3	0
MALARIA	4	37	0	0	6	1	0	0	0	0	1	1	0	0	1	0
SMALLPOX	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
MEASLES	2	13	2	0	1	0	1	0	0	0	0	1	0	1	0	1
SCARLET FEVER	1	0	0	1	7	2	10	2	1	2	1	0	0	0	0	0
WHOOPING COUGH	0	5	0	0	18	0	15	0	0	0	0	0	0	1	0	0
DIPHTHERIA	0	1	1	0	2	0	3	0	0	0	2	0	0	3	0	0
INFLUENZA	0	0	0	0	2	21	0	0	0	0	0	0	0	8	0	0
MUMPS	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0
DYSENTERY	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
LEPROSY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POLIOMYELITIS	0	1	2	0	4	1	0	0	1	0	1	1	0	6	0	0
LETH.ENCEPHALITIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MENINGITIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHICKENPOX	0	1	0	0	18	0	11	0	0	0	0	0	0	10	0	0
GERMAN MEASLES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DENGUE	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TETANUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUBERCULOSIS	0	9	0	0	10	1	9	1	0	4	0	7	0	15	1	0
SYPHILIS	68	311	48	1	842	71	799	16	2	33	148	165	225	88	114	7
CHANCROID	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
GONOCOCCUS	3	26	15	0	2	10	14	0	0	2	2	6	2	20	2	2
OPTH. NEONATORUM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CANCER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PELLAGRA	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TULAREMIA	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
TRACHOMA	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
PNEUMONIA	0	2	0	0	0	0	0	0	0	5	0	2	0	1	0	0
HOOKWORM	4	409	0	0	60	8	268	0	0	0	0	4	0	0	0	58
TRICHINOSIS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
UNDULANT	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0

REPORTED CASES OF NOTIFIABLE DISEASES IN THE STATE OF FLORIDA

	OKEECHOBEE	ORANGE	OSCEOLA	PALM BEACH	PASCO	PINELLAS	POLK	PUTNAM	ST. JOHNS	ST. LUCIE	SANTA ROSA	SARASOTA	SEMINOLE	SUMTER	SUWANNEE	TAYLOR	UNION	VOLUSIA	WAKULLA	WALTON	WASHINGTON
TYPHOID	0	2	0	4	1	21	1	0	0	0	0	0	2	0	0	2	0	5	0	0	0
PARATYPHOID	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TYPHUS	0	14	0	1	0	15	1	0	0	0	0	3	1	0	2	6	7	1	0	0	0
MALARIA	0	0	0	2	0	8	1	0	0	0	0	0	0	0	0	11	1	3	37	1	0
SMALLPOX	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEASLES	0		0	48	1	122	41	0	0	0	0	2	0	0	1	194	6	10	17	0	6
SCARLET FEVER	0	31	0	2	0	37	20	0	0	0	0	1	0	1	0	2	0	7	1	0	0
WHOOPING COUGH	0	27	1	48	5	99	2	0	0	0	0	0	0	3	0	3	1	28	1	0	0
DIPHTHERIA	0	17	2	2	2	11	17	1	0	1	0	3	0	0	0	0	0	26	2	1	1
INFLUENZA	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	8	10	3	0	1	0
MUMPS	0	0	0	4	1	20	15	0	0	0	0	1	0	0	0	4	0	0	0	0	0
DYSENTERY	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
LEPROSY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POLIOMYELITIS	0	3	0	0	0	4	2	0	1	0	0	0	0	2	0	0	1	1	1	0	0
LETH.ENCEPHALITIS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MENINGITIS	0	0	0	0	0	2	4	0	0	0	0	0	0	0	1	0	0	0	0	0	0
CHICKENPOX	0	30	0	21	0	26	4	0	0	0	0	0	1	10	0	7	0	55	0	0	1
GERMAN MEASLES	0	1	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
DENGUE	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TETANUS	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUBERCULOSIS	0	8	0	2	3	24	19	0	1	0	0	1	2	0	0	7	2	6	0	0	0
SYPHILIS	3	1101	70	1181	86	452	756	111	65	63	4	71	242	40	52	225	97	133	100	5	3
CHANCROID	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
GONOCOCCUS	0	45	0	5	5	42	20	2	2	0	1	5	12	1	10	15	5	17	3	1	3
OPTH. NEONATORUM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CANCER	0	24	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	0	0	0
PELLAGRA	0	12	0	1	0	0	0	0	0	0	0	0	1	0	0	6	0	0	0	0	0
TULAREMIA	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRACHOMA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PNEUMONIA	0	30	0	1	0	2	2	0	0	0	0	0	0	0	0	0	2	0	2	0	0
HOOKWORM	0	200	0	1	4	6	8	2	3	0	0	1	0	0	20	793	38	20	158	0	0
TRICHINOSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
UNDULANT	0	1	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Activities of 17 county health units reported to the United States Public Health Service for the year 1939

COMMUNICABLE DISEASE CONTROL	
Admissions to service	2404
Consultations with physicians	749
Field visits	5098
Smallpox immunizations	10654
Diphtheria immunizations	12148
Typhoid fever immunizations	12716
VENEREAL DISEASE CONTROL	
Admissions to medical service	8435
Clinic visits	81743
Field visits	6129
TUBERCULOSIS CONTROL	
Individuals admitted to medical service	1935
Individuals admitted to nursing service	1882
Clinic visits	5110
Nursing visits	8460
MATERNITY SERVICE	
Cases admitted to medical service	4390
Cases admitted to nursing service	7155
Visits by antepartum cases to medical conferences	11878
Nursing visits	18579
INFANT HYGIENE	
Individuals admitted to medical service	1516
Individuals admitted to nursing service	3308
Visits to medical conferences	3424
Nursing visits	10212
PRESCHOOL HYGIENE	
Individuals admitted to medical service	2537
Individuals admitted to nursing service	4677
Visits to medical conferences	3823
Nursing visits	12556
Inspections by dentists or dental hygienists	398
SCHOOL DYGIENE	
Inspections by physicians or nurses	78764
Examinations by physicians	32429
Individuals admitted to nursing service	10842
Nursing visits	24897
Inspections by dentists or dental hygienists	21536
ADULT HYGIENE	
Medical examinations	4922
MORBIDITY SERVICE	
Medical visits	8853
Nursing visits	9866
Admissions to hospitals	392
GENERAL SANITATION	
Approved individual water supplies installed	355
Approved excreta disposal systems installed	6113
Field visits	79348

PROTECTION OF FOOE AND MILK	
Food-handling establishments registered for supervision	1259
Field visits to food-handling establishments	9006
Dairy farms registered for supervision	181
Field visits to dairy farms	1852
Milk plants registered for supervision	55
Field visits to milk plants	404
LABORATORY	
Specimens examined	70294

MULTIGRAPHING

TABLE XV

1939	Sheets Multigraphed	Sheets Mimeographed	Pads	Sheets Assembled	Sheets Perforated	Books Stapled
January	536,179	13,855	50		7,500	100
February	252,051	24,726	4938	10650	97,000	450
March	305,100	44,425		5337		1002
April	404,665	40,253	550	21671	10,000	671
May	295,918	89,806	480			
June	229,221	89,468	580	12120	31,000	500
July	665,100	5,203	55	19000		1000
August	147,760	29,770	1774	1800	36,056	200
September	318,120	500,513	1917	391000		10,000
October	246,425	20,724	1491	27800	12,500	101
November	322,930	48,136		257,450	100,000	6001
December	242,424	231,254	1764	125,185	8,000	1876
TOTAL	3,365,893	1,138,131	13,599	872,013	302,056	21,901

1939	Sheets Punched	Sheets Numbered	Sheets Folding	Books Stripped	Forms Multigraph	Forms Mimeograph
January	2,000				57	100
February	500				60	191
March	10,650	271		157	40	170
April	1,000	1,000			65	139
May					50	162
June	5,127				115	126
July	2,720	2,000			21	39
August		26,600		200	42	82
September	6,100	1,000			81	245
October	27,000	1,000			67	90
November	2,550		2,940		77	240
December	3,250			700	33	352
TOTAL	60,897	31,871	2,940	1,057	708	1,936